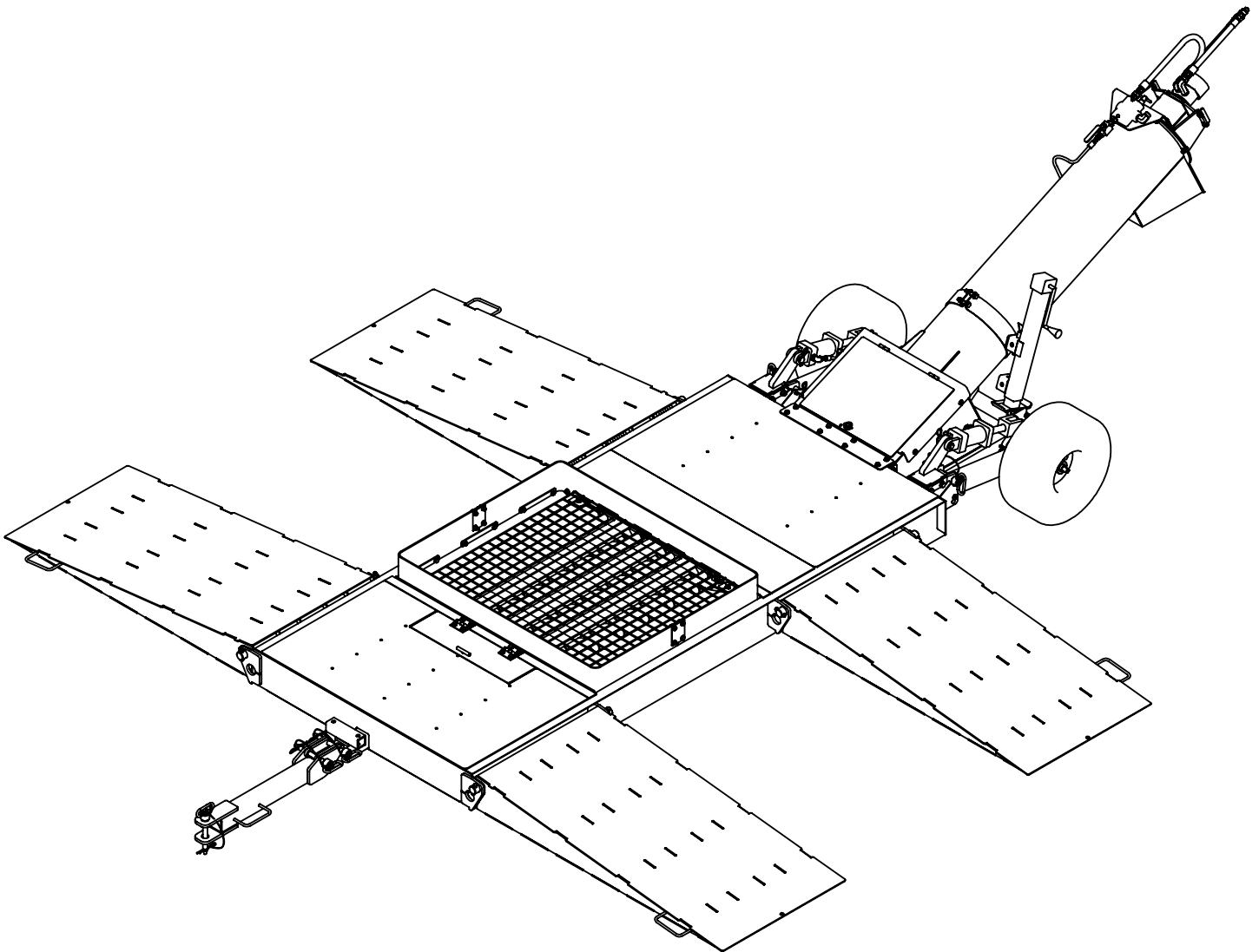


BURCHLAND

GSX 100 / 130

DRIVE OVER HOPPER

Operation, Maintenance and Parts Manual



BURCHLAND

GSX ***DRIVE OVER HOPPERS***

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The Safety Alert symbol to the left identifies important safety messages on the product and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety messages.

Signal Words

Note the use of the signal words DANGER, WARNING, CAUTION, and NOTICE with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.

The Safety Alert symbol means ATTENTION, BE ALERT!, YOUR SAFETY IS INVOLVED.

DANGER



Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

WARNING



Indicates a hazardous situation that, if not avoided, could result in serious injury or death.

CAUTION



Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

General Safety Instructions



- Have a first-aid kit available for use and know how to use it.
- Have a fire extinguisher available, stored in a highly visible location, and know how to use it.



- Wear appropriate protective gear. This list may include but is not limited to:

- hard hat
- protective shoes with slip resistant soles
- protective glasses or goggles
- heavy gloves
- wet weather gear
- hearing protection
- respirator or filter mask



- Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing, or unplugging the equipment.
- Do not attempt any unauthorized modifications to your Burchland product as this could affect function or safety, and could affect the life of the equipment.
- Inspect and clean the working area before operating.
- Keep hands, feet, clothing, and hair away from moving parts.
- Ensure bystanders are clear of the area before operating.



Start-Up Safety

- Do not let inexperienced operators or children run this equipment.
- Place all tractor and machine controls in neutral before starting.
- Operate only with ROPS and seatbelt equipped tractors.
- Do not operate inside a building unless there is adequate ventilation.
- Ensure all shields are in place and in good condition before operating.
- Stay clear of PTO shaft on auger and machine when engaging PTO.
- Keep clear of the auger when raising for transport or lowering for operation.
- Inspect the machine carefully each day by walking around it before starting operation.

Operation Safety

- Do not permit riders.
- Do not wear loose fitting clothing during operation.
- Do not allow anyone other than the operator close to the auger hopper when in operation.
- Never stand near the hopper while raising or lowering.
- Have another person nearby who can shut down the equipment in case of accident.
- Do not operate with any of the safety guards removed.
- Keep body, hair, and clothing away from moving parts. Stay away from intake during operation.

Transport Safety

- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Always travel at a safe speed. Consult local authorities for further details. Use cautions when turning corners or meeting traffic.
- Use extreme care and minimum ground speed when operating or transporting on hillsides, over rough ground, or near ditches or fences.
- Make sure the SMV (slow moving vehicle) emblem and all the lights and reflectors that are required by local authorities are in place, are clean, and can be seen by all traffic.
- Do not allow riders on the equipment or towing vehicle during transport.
- Stay away from overhead obstructions and power lines when operating and transporting. Electrocution can occur without direct contact.
- Ensure that tires are inflated to the manufacturer's recommended pressure.

Storage Safety

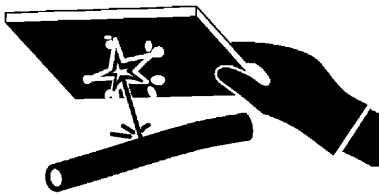
- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Block the wheels of the hopper so that it will not move and tear the jack from it's mount.

Service and Maintenance Safety

- Stop engine, set brake, remove ignition key, and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.
- Support the equipment with blocks or safety stands before working beneath it.
- Follow good shop practices including:
 - keep service area clean and dry
 - be sure electrical outlets and tools are properly grounded
 - use adequate light for the job.
- Use only tools, jacks, and hoists of sufficient capacity for the job.
- Replace and secure all shields removed during servicing before operating.
- Use heavy leather gloves to handle sharp objects.
- Check hydraulics regularly for leaks. Use cardboard to look for leaks, and use hand and eye protection.
- Relieve pressure on hydraulic system before repairing or adjusting.
- Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.

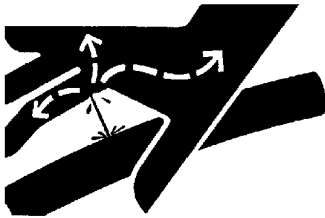
Hydraulic Safety

- Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.
- Keep all components in the hydraulic system tightly secured and in good condition and clean.
- Replace any worn, cut, abraded, flattened, or crimped hoses.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or concrete. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.



Avoid High-Pressure Fluids

This machine uses a high-pressure hydraulic system. Escaping fluid under pressure can penetrate the skin causing serious injury. Never search for leaks with your hands. Protect hands. Use a piece of cardboard to find location of escaping fluid. Stop engine and relieve pressure before disconnecting lines or working on hydraulic system.



If hydraulic fluid penetrates your skin, see a doctor immediately. Injected fluid must be removed surgically within hours or gangrene may result. Contact a knowledgeable medical source or call 911.

Safety Decals

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See decal location figures below.
- Replaced parts must display the same decal(s) as the original part.
- Safety decals are available from your dealer or by calling the factory at 641-498-2063.

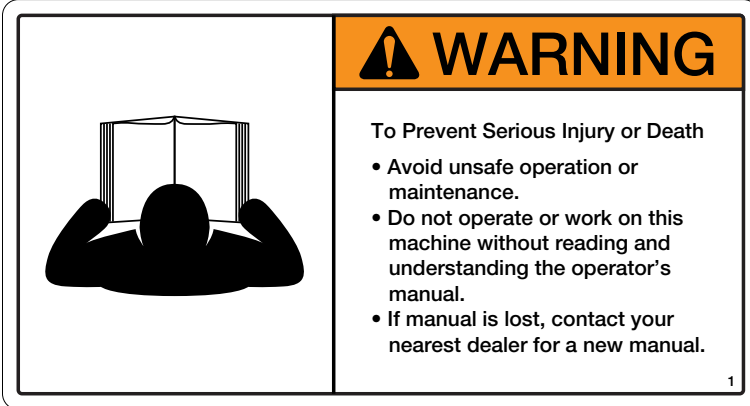
Decal Installation

- To install safety signs, ensure the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper and align over the specified area. Carefully press in place.
- Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.

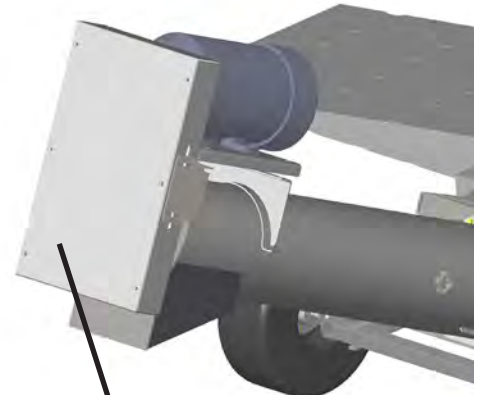
BURCHLAND Drive Over Hopper - SAFETY

Safety Decals

Part #11187
1 Required



Electric Drive Decal Placement



Part #11190
1 Required



Part #12081
2 Required. 3 on
electric drive models



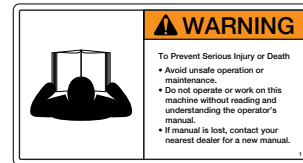
Part #12740
4 Required



BURCHLAND Drive Over Hopper - SAFETY

Safety Decal Placement

One of decal #12740 on inside and outside of cover. Place here on optional side chute cover also.



Two of decal # 12740 required in the hopper. One on each side.



Place decal #12081 on the bottom side of the roller chain access door.



EQUIPMENT MATCHING

Hydraulic System Requirements:

In order to operate the hydraulic drive motor, the tractor hydraulic system must be capable of 15 gpm (56.8 L/min) at 1200 psi (8273 kPa) for the GSX-100 (10") hopper, and 15 gpm (56.8 L/min) at 1800 psi (12,411 kPa) for the GSX-130 (13") hopper. Use caution routing the hoses from the drive over hopper to the tractor. Ensure that they are not a tripping hazard and that they can't become tangled in the auger or PTO drive.

Electric System Requirements:

A minimum 10 hp (7.35 Kw) electric motor (1725-1750 rpm) is required to power the GSX-100 (10") hopper, and a minimum 15 hp (11.03 Kw) electric motor (1725-1750 rpm) is required to power the GSX-130 (13") hopper. Ensure the power source has adequate amperage at the proper voltage. Have a licensed electrician provide power and install weatherproof control switches in a safe and convenient location for the operator. All power cords should be protected and secured during operation. When purchasing an electric drive hopper, the customer is responsible for supplying the electric motor, all wiring and controls.

Preparing the machine for operation from transport mode. (Manual lift models)

NOTICE

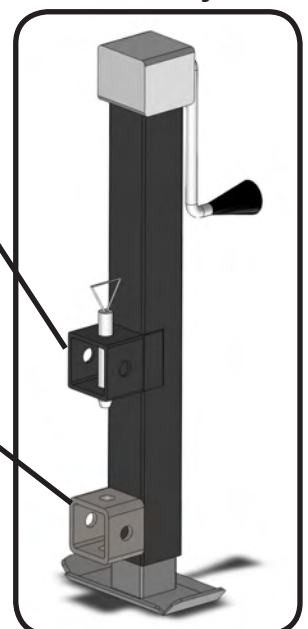
Locate the machine on reasonably flat and firm ground, free from obstructions. Placement on uneven or soft ground may cause excessive loads on the machine or clearance issues. Corresponding damage to the machine or transport vehicle could result.

1. Use the towing vehicle to back the drive over hopper into place. The discharge spout of the hopper should be over the intake grate of the auger you plan to use. Make sure there is a straight line path for the grain truck to drive over the ramps of the hopper.
2. The supplied jack comes with an upper and lower mounting tube. The lower mount is used when placing the jack on the hitch end of the machine. The upper mount is used when placing the jack on the discharge end of the machine.
3. Unhook the towing vehicle and use the supplied jack to lower the hitch end of the machine to the ground. Once lowered to the ground, the hitch can be removed if necessary.

Upper mount for discharge tube.

Lower mount for hitch.

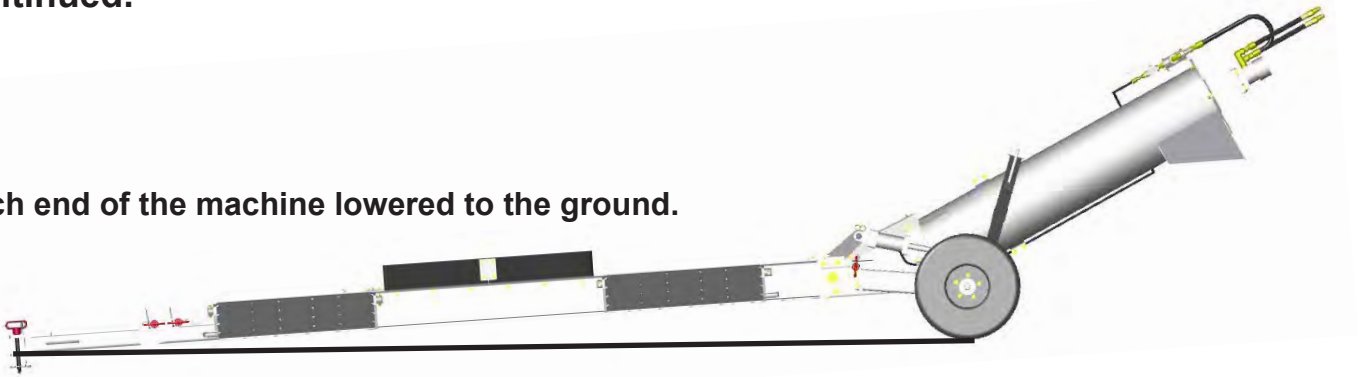
Manual lift jack



BURCHLAND Drive Over Hopper - OPERATION

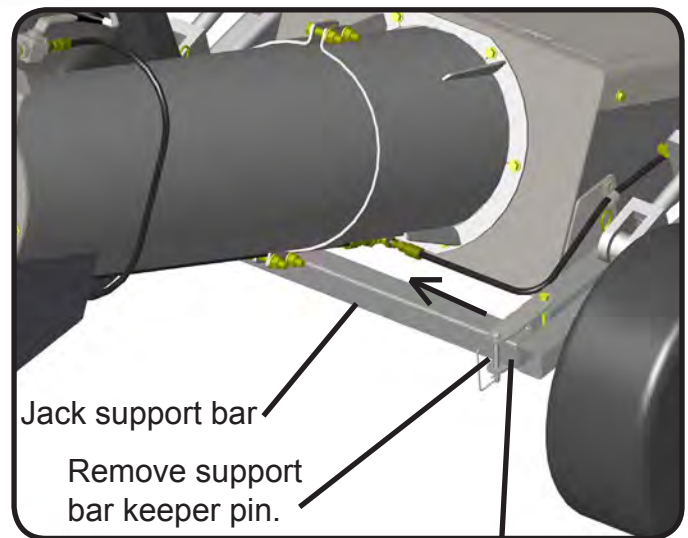
Preparing the machine for operation from transport mode. (Manual lift models) continued.

Hitch end of the machine lowered to the ground.



4. Remove the jack from the hitch end of the hopper and take it to the discharge end of the machine.

5. Lower the jack support bar to the ground by removing the support bar keeper pin. Rotate the lock bracket to the side and the jack support bar can be dropped to the ground.

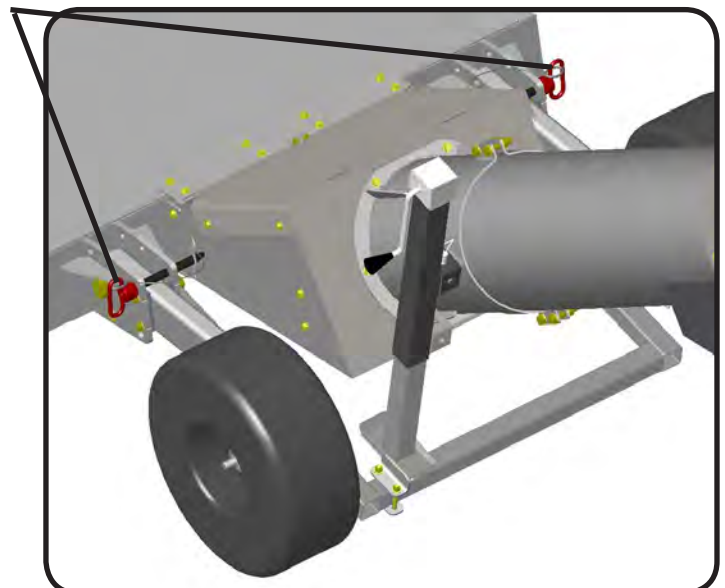


Rotate lock bracket to the side to lower the jack support bar.

Remove transport lock pins once weight is removed.

6. Mount the jack on the square jack mount lug on the side of the discharge auger tube. Lower the jack down until it is pushing on the jack support bar. Keep cranking the jack to remove weight from the transport lock pins.

7. Once there is no weight on the transport lock pins, pull one pin on each side of the hopper. Now use the jack to lower the hopper to the ground. The transport wheels will pivot up as the hopper frame is lowered. Once the hopper frame is on the ground, the jack can remain on the discharge auger during operation.



BURCHLAND Drive Over Hopper - OPERATION

Preparing the machine for operation from transport mode. (Manual lift models) continued.

8. Un-hook the ramp lock chains and manually lower the ramps to the ground by holding on to the ramp handle and pulling the top of the ramp away from the hopper.



CAUTION – KEEP YOURSELF AND ANY BYSTANDERS AWAY FROM THE RAMPS AS THEY ARE BEING LOWERED TO THE GROUND.

Preparing the machine for operation from transport mode. (Hydraulic lift models)

See steps 1-3 above under “Preparing the machine for operation from transport mode (Manual lift models)”. Steps 1-3 are also used on the hydraulic lift models to lower the hitch end of the hopper to the ground.

NOTICE

Foreign material can severely damage hydraulic components. Clean any dirt or debris from the hose ends and hydraulic system couplers with a clean rag or paper towel before connecting.

WARNING



Always turn off the tractor engine before connecting any hoses to the tractor hydraulic valve couplers.

WARNING



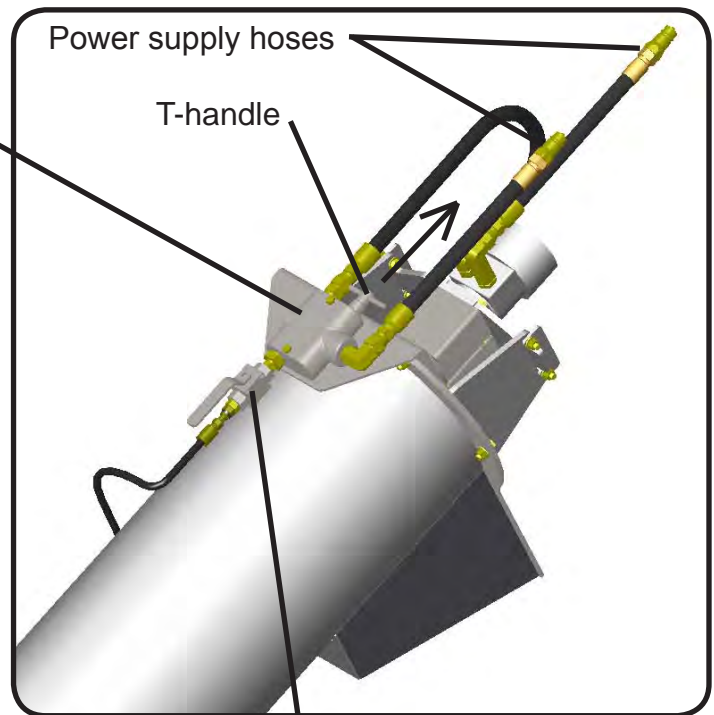
Damaged hydraulic hoses can fail suddenly causing unexpected movement of the machine that will result in serious injury or death.

- Route hydraulic hoses to prevent pinching, rubbing, or binding.
- Keep the hoses away from moving parts.
- Secure the hoses to the machine to prevent dragging while transporting.
- Cover or protect the hoses from damage during operation.
- Repair or replace damaged hoses.

BURCHLAND Drive Over Hopper - OPERATION

Preparing the machine for operation from transport mode. (Hydraulic lift models) continued.

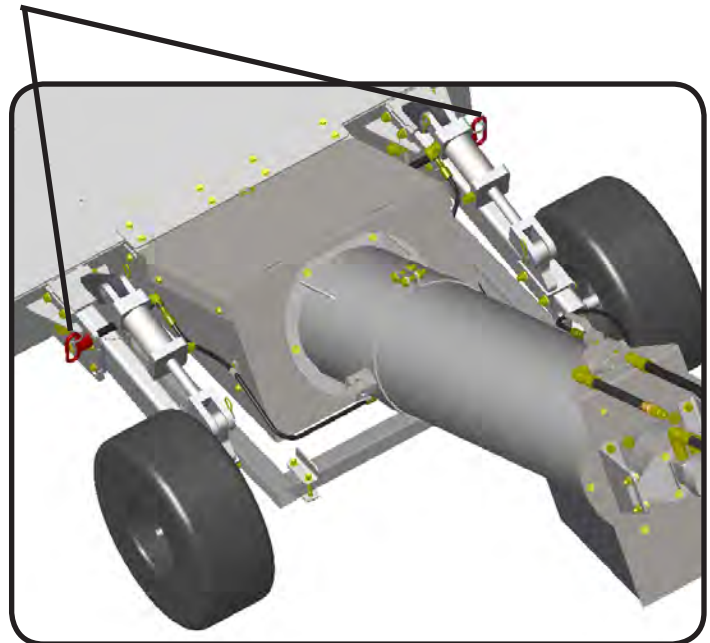
4. Hook up the power supply hoses to a hydraulic valve on a tractor. Make sure the tractor is not running when the hoses are hooked up.
5. Pull out the T-handle on the hydraulic selector valve to allow hydraulic flow from the tractor to the hydraulic lift cylinders on the drive over hopper.
6. Make sure the hydraulic lock valve is open, allowing flow to the hydraulic lift cylinders.



Remove transport lock pins once weight is removed.

Hydraulic lock valve. Open position.

7. With the tractor running, engage the hydraulic control valve to lift the drive over hopper slightly and remove the weight from the transport lock pins.
8. Remove the transport lock pins and set them aside.
9. Use the tractor's hydraulic control valve to lower the discharge end of the drive over hopper to the ground. Close the hydraulic lock valve to prevent any hydraulic pressure from reaching the lift cylinders while the drive over hopper is being used.
10. Un-hook the ramp lock chains and manually lower the ramps to the ground by holding on to the ramp handle and pulling the top of the ramp away from the hopper.



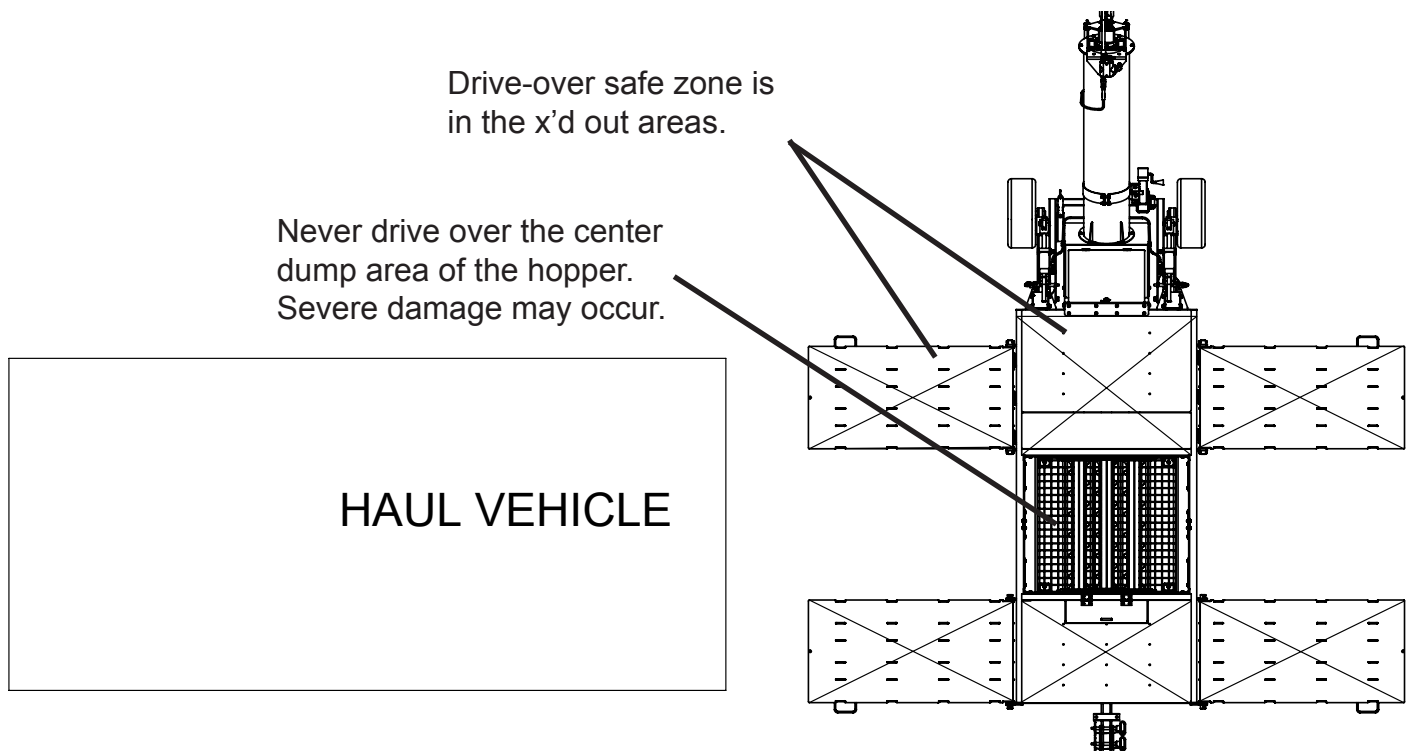
CAUTION – KEEP YOURSELF AND ANY BYSTANDERS AWAY FROM THE RAMPS AS THEY ARE BEING LOWERED TO THE GROUND.

OPERATION - UNLOADING

NOTICE

Align the tires of the haul vehicle with the ramps of the drive over hopper. Driving outside the ramp area may cause severe damage to the drive over hopper.

1. Set up the machine per instructions in the section above (Preparing machine for operation from transport mode).
2. Position the haul vehicle for unloading. Ensure the tires are aligned with the safe drive-over zone. See the figure below for the safe drive-over zone.



3. Drive the haul vehicle over the hopper.
4. Align the vehicle's grain discharge with the intake area of the drive over hopper.
5. Start the hopper according to the instructions listed below under "Starting".
6. Begin unloading grain into the hopper.

OPERATION - STARTING

Hydraulic Models

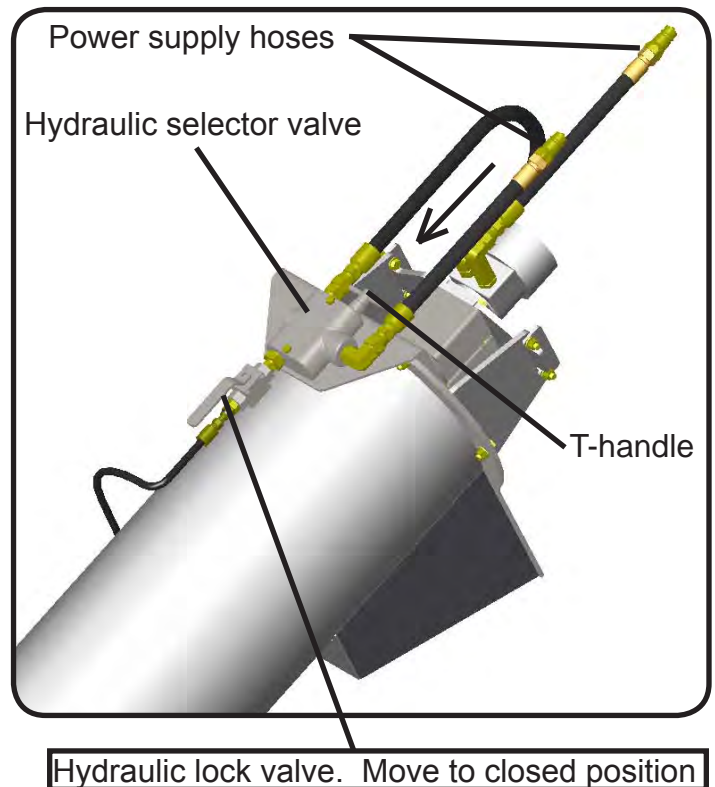
1. Place all tractor and hydraulic controls in neutral.
2. Start the tractor and run the engine at idle speed.
3. Place the tractor hydraulic control in a detent or continuously on position.
Important - Make sure the augers are turning the correct direction to move grain from the hopper intake area to the discharge spout. When standing near the discharge end of the machine and looking at the intake hopper, the augers should be turning clockwise.
4. Increase engine speed and adjust hydraulic flowrate on the tractor to achieve the desired augering speed.

Hydraulic models with optional hydraulic lift only.

Complete steps one and two listed above.

3. Push in the T-handle on the hydraulic selector valve to allow oil flow from the tractor to the auger drive motor. With the T-handle in the out position, oil flow is directed to the hydraulic lift cylinders.
4. Close the hydraulic lock valve to prevent any hydraulic oil from leaking out to the lift cylinders.

Complete steps three and four listed above.



Electric Models

1. Place the control switch (customer supplied) in the on position.

OPERATION - SHUTDOWN

Hydraulic Models

1. Run the machine until the center hopper and discharge tube are empty.
2. Adjust the tractor engine speed to idle.
3. Place tractor hydraulic controls in neutral.
4. Shut off the tractor engine.

Electric Models

1. Run the machine until the center hopper and discharge tube are empty.
2. Turn the motor control switch (customer supplied) off.

Preparing the machine for transport from operation mode.

WARNING



Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

NOTICE

Empty the auger before transporting. Transporting a full auger will place excessive loads on the discharge tube assembly, frame, axle assembly, hitch, and towing unit.

Preparing the machine for transport from operation mode. - Continued

Transport Safety

To reduce the risk of injury or death to people using this equipment, follow basic safety precautions when transporting.

1. Make sure that all lights and reflectors required by the local highway and transport authorities are in place, are functioning, and can be seen clearly by all overtaking and oncoming traffic.
2. Be sure the unit is hitched securely to the towing vehicle.
3. Use hazard-warning flashers when transporting with a tractor unless prohibited.
4. Keep to the right and yield the right-of-way to allow faster traffic to pass.
5. Take special care and precautions when transporting during times of limited visibility such as rain, snow, fog, dusk, or at night. It is recommended that you wait for a more appropriate time to move.
6. DO NOT transport faster than 20 mph unless GVWR is more than 7000 lb. Never exceed 40 mph.

Preparing the machine for transport from operation mode. - Continued

1. Check the wheel nut torque prior to transporting the unit. See the maintenance section for recommended torque values.
2. Check that the tires are inflated to the manufacturer's recommended pressure prior to transporting the unit.
3. Fold up the ramps and use the supplied chains and hooks to lock the ramps together in an upright position.



CAUTION – KEEP YOURSELF AND ANY BYSTANDERS AWAY FROM THE RAMPS AS THEY ARE BEING RAISED AND LOCKED.

4. Raise the discharge end of the hopper. See the “Preparing machine for operation from transport mode” earlier in this manual.
5. Raise the hitch end of the hopper until the height of the hitch matches the connecting hitch on the tow vehicle. See the “Preparing machine for operation from transport mode” earlier in this manual.

Preparing the machine for transport from operation mode. - Continued

6. Disconnect the hopper from the hydraulic source or disconnect the electric supply cord on electric drive models.

NOTICE

Secure hydraulic hoses or electric power cord on electric drive models to the machine to prevent damage from dragging while transporting.

7. Secure hydraulic lines or any power cords to the machine before transporting.
8. Connect the tow vehicle to the drive over hopper and use a retainer to lock the hitch pin in place.

CAUTION



ALWAYS USE TRANSPORT CHAINS WHEN TRANSPORTING IMPLEMENTS. FAILURE TO USE CHAINS COULD CAUSE PERSONAL INJURY OR DAMAGE IF IMPLEMENTS BECOME DISENGAGED.

9. Install transport safety chains (**customer supplied**) between the tongue of the drive over hopper and the frame of the tow vehicle. Transport chains should have a minimum rating equal to the gross weight of implement and all attachments. Allow no more slack in chains than necessary to permit turning. Replace transport chains if any link or end fitting is broken, stretched, or damaged. **DO NOT WELD TRANSPORT CHAINS.**

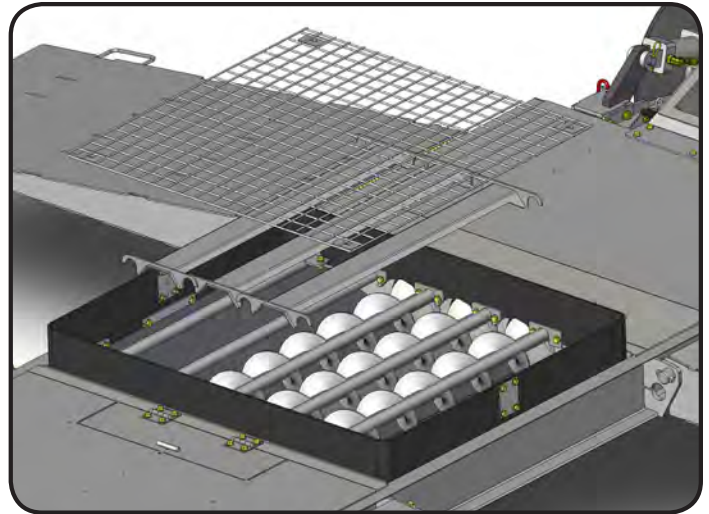
10. Crank the jack up fully and stow the jack on a square jack mount lug on the hitch or on the discharge tube.

Cleanout

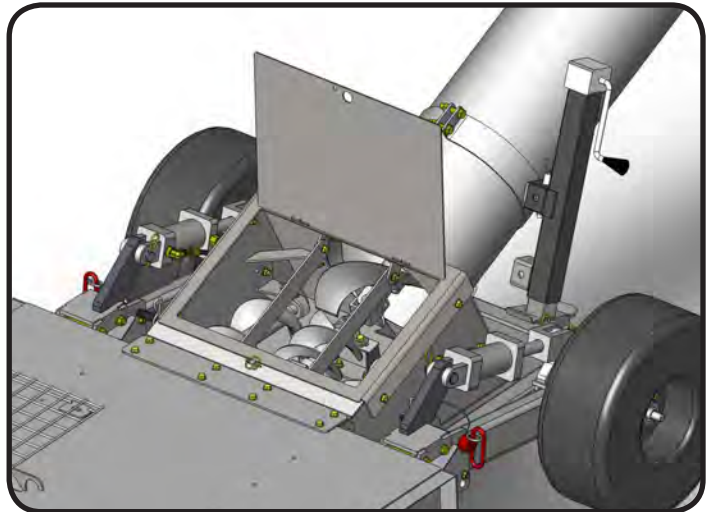
1. Remove any excess grain from on top and around the hopper.
2. Run the unit to clean out the majority of the grain.
3. Disable and lock out all power sources, hydraulic or electric.

Cleanout - continued

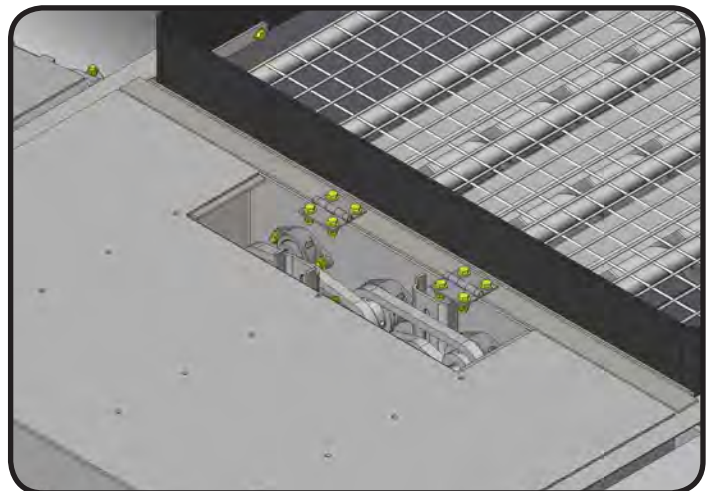
4. Remove the center hopper grate and auger covers as shown on the right.
5. Use compressed air or a shop vac to remove any excess grain from the center dump area.



6. Open the junction box cover as shown on the right. Use a shop vac to remove any grain from inside the junction box.



7. Open the roller chain drive access door as shown on the right. Remove any accumulated grain or material.
8. Replace all covers and close all doors that were opened for cleanout.



Storage

WARNING



Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

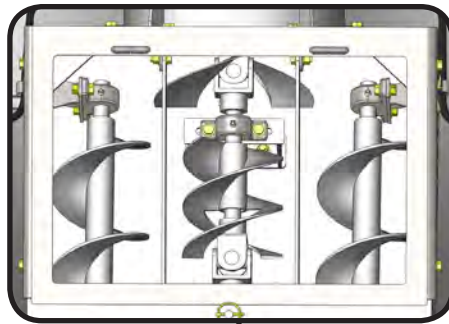
1. Store the machine on a level surface, free of debris, and in an area away from human activity. Store in a dry place, or use a tightly secured tarp to protect the equipment from the weather.
2. Ensure that the unit is in transport position.
3. Remove all residual material and clean the machine thoroughly.
4. Inspect the unit at stress points for cracks.
5. Repair or replace any worn or damaged components to prevent any unnecessary downtime at the start of the next season.
6. Touch up paint nicks and scratches to prevent rusting.
7. Check hydraulic fittings, hoses, lines, couplers, and valves. Tighten any loose fittings. Replace any hose that is badly cut, nicked, abraded, or is separating from the crimped end of the fitting. Secure the hoses or any power cords to the machine.
8. Inspect and tighten all fasteners; replace fasteners if required.
9. Store the machine with the hitch end slightly lowered to allow any water to drain through drain holes in the hopper.

BURCHLAND Drive Over Hopper - MAINTENANCE

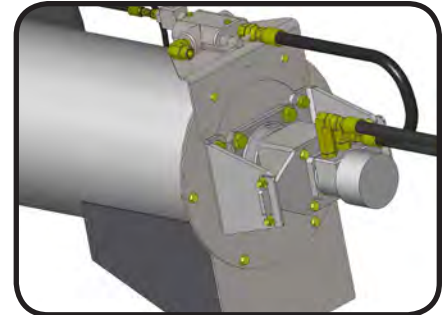
Lubrication

Lubricate with an SAE multi-purpose grease. All fittings must be free from dirt and paint to insure entry of lubricant inside bearing.

Grease auger bushings (4). Grease U-joints (2). Caution - Do not over grease the u-joints. U-joint seal damage may occur.



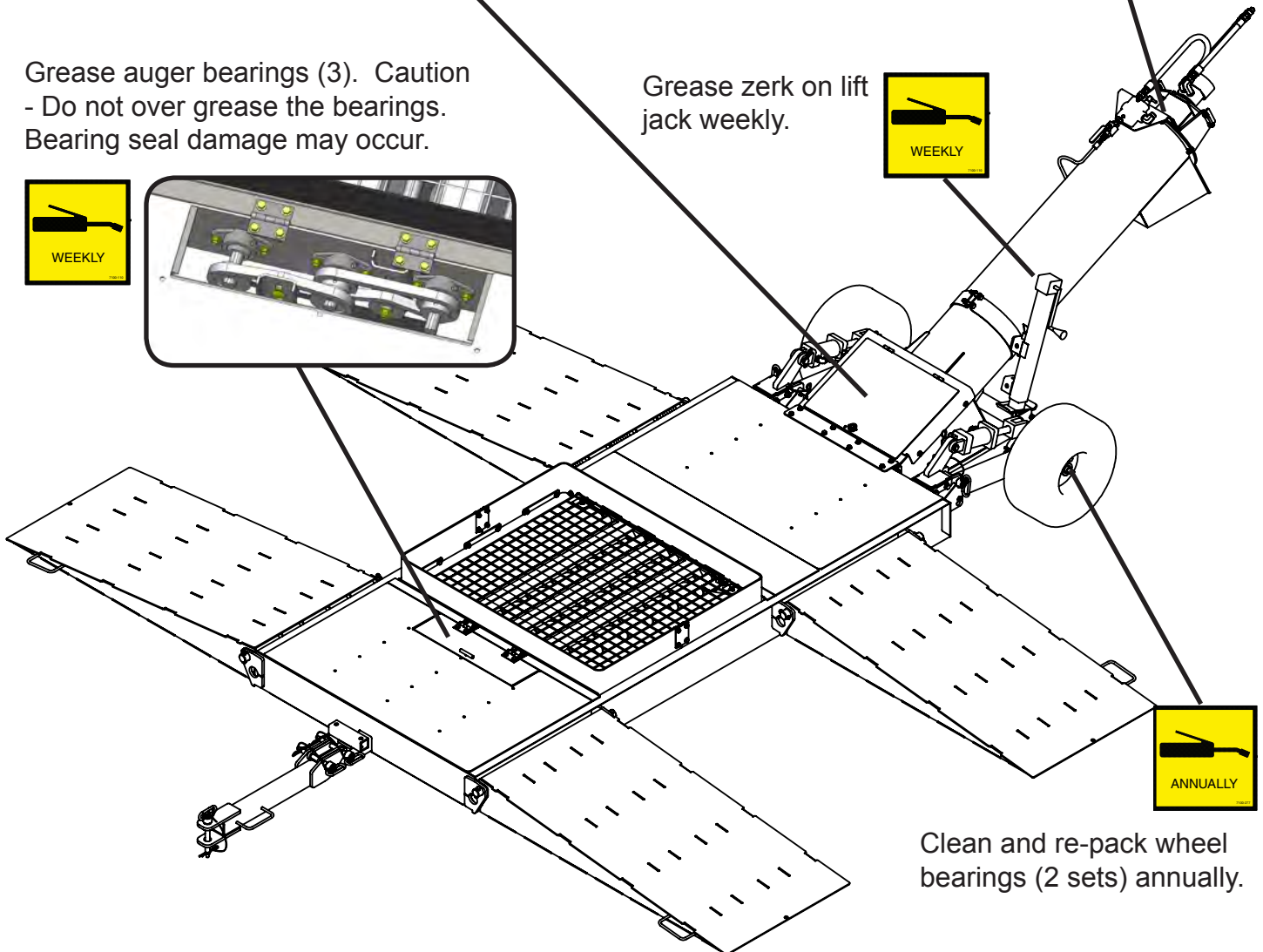
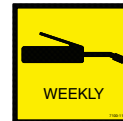
Grease auger end bearing (1). Caution - Do not over grease the bearing. Bearing seal damage may occur.



Grease auger bearings (3). Caution - Do not over grease the bearings. Bearing seal damage may occur.



Grease zerk on lift jack weekly.



Clean and re-pack wheel bearings (2 sets) annually.

Servicing the drive chains.

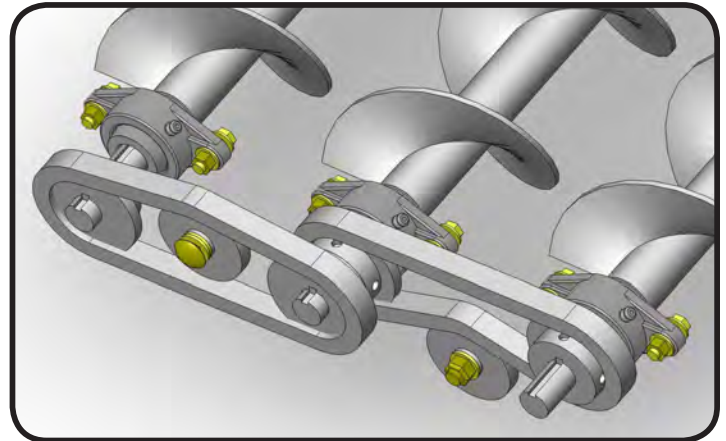
Drive chains are located under the access door on the top of the drive over hopper platform.



1. Check the chain slack by moving the midpoint of the longest chain span. It should move approximately 3/8" (10 mm). Do not over-tighten the chain as that may cause damage to the augers or idler sprockets.

2. Adjust the chain slack by loosening the idler sprockets. Reposition idler sprockets until chain slack is adequate. If idler sprockets run out of travel, remove a link from the chain.

3. Oil the chain with a roller chain lubricant.



Wheel bearings.

The wheel bearings should be cleaned, repacked and adjusted every 12 months. Use a number 2 wheel bearing grease to repack the bearings and adjust the bearing to a free-rolling fit with no end play.

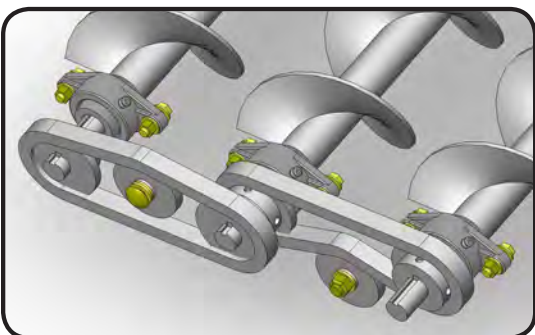
Wheel nut torque.

Tighten wheel nuts to 90 ft. lbs. Check wheel nut torque each time the wheel bearings are serviced and before transporting the hopper on the road.

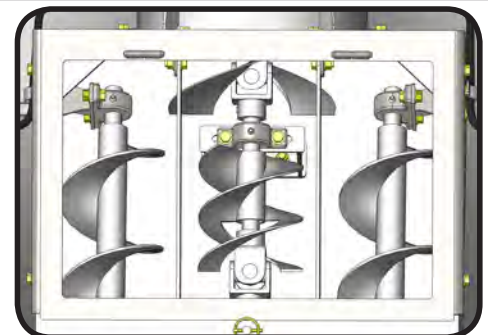
U-joint and sprocket set screws

IMPORTANT - Tighten setscrews on roller chain sprockets and also on u-joints in the junction box each season before operating for the first time. Also, check setscrews after one week of operation each season.

2 setscrews on each of 4 sprockets for a total of 8. See the auger drive page of the parts book for an exploded view.



4 setscrews on each of 2 u-joints for a total of 8. See the junction box page of the parts book for an exploded view.



Mounting bolts and hardware.

WARNING






Parts separation can result in death, serious injury, and damage to property and equipment. Check all hardware is tight before operating hopper the first time. Check all hardware again after first 50 hours of operation and beginning of each season. Check wheel nuts before road travel.

NOTICE

Over-tightening hardware can reduce its shock load capacity and cause equipment failure.

Hardware used on Burchland Drive Over Hoppers are Grade 8 (high strength) unless otherwise noted. Grade 8 cap screws are marked with six radial lines on the head. Hardware must be replaced with equal size, strength, and thread type.

TORQUE VALUES CHART - PLATED HARDWARE

	Grade 2 (No marks) 				Grade 5 (3 marks) 				Grade 8 (6 marks) 			
Diameter	Coarse		Fine		Coarse		Fine		Coarse		Fine	
	ft-lb	N-m	ft-lb	N-m	ft-lb	N-m	ft-lb	N-m	ft-lb	N-m	ft-lb	N-m
1/4"	50 in-lb	5	56 in-lb	6	76 in-lb	8	87 in-lb	9	9	12	10	13
5/16"	8	10	9	12	13	17	14	19	18	24	20	27
3/8"	15	20	17	23	23	31	26	35	33	44	37	50
7/16"	25	33	27	36	37	50	41	55	52	70	58	78
1/2"	35	47	40	54	57	77	64	86	80	108	90	122
9/16"	50	67	60	81	80	108	90	122	115	156	130	176
5/8"	70	95	80	108	110	149	125	169	160	217	180	244
3/4"	130	176	145	196	200	271	220	298	280	379	315	427
7/8"	125	169	140	189	320	433	350	474	450	610	500	678
1"	190	257	205	278	480	650	530	718	675	915	750	1016
1 1/8"	265	359	300	406	600	813	670	908	960	1301	1075	1457
1 1/4"	375	508	415	562	840	1138	930	1261	1360	1844	1500	2033
1 3/8"	490	664	560	759	1100	1491	1250	1694	1780	2413	2030	2752
1 1/2"	650	881	730	989	1450	1966	1650	2237	2307	3127	2670	3620

NOTE: Torque unplated hardware and bolts with lock nuts approximately 1/3 higher than above values. Torque bolts lubricated before installation to 70% of value shown in chart.

BURCHLAND Drive Over Hopper - WARRANTY

LIMITED WARRANTY FOR NEW BURCHLAND MFG. EQUIPMENT

The manufacturer warrants to the original retail purchaser that this product is free from defects in material and workmanship and agrees to repair or replace, at manufacturer's discretion, any defective product free of charge within 2 years from the date of purchase.

This warranty is not transferable and does not cover damage resulting from defects other than in material or workmanship, or damage caused by unreasonable use, including the failure to provide reasonable and necessary maintenance. Also, the warranty obligations do not apply to conditions resulting from misuse, alteration or accident. In addition, this warranty does not cover replacement of parts that may wear and need to be replaced with reasonable use within the warranty period or which may require replacement in connection with normal maintenance. This Warranty terminates once the Product has been altered or repaired by others without Burchland's express written consent.

SAVE YOUR SALES SLIP

Proof of purchase in the form of your dated sales receipt, cash register slip, etc. showing the serial number and the model of your product will be required before our dealers can perform warranty service on the product. You must at your own expense, arrange to deliver or ship the product for warranty repairs and arrange for pickup or return of the product after repairs have been made.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR OTHERWISE, SHALL BE EXCLUDED AND HEREBY DISCLAIMED. THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF PROFITS LOSS OF PRODUCTION OR ANY DELAY ARISING IN CONNECTION WITH THE INABILITY TO USE THE PRODUCTS.

HOW TO OBTAIN WARRANTY SERVICE

Warranty service can be obtained from a Burchland dealer authorized to make warranty repairs. If you need warranty service, check first with the dealer from whom you purchased the product.

The manufacturer will not make any reimbursements for warranty service, except to Burchland dealers authorized to make warranty repairs. You must present your sales receipt when making any claim for warranty service.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If you have any questions regarding your warranty rights and responsibilities, you should contact your Burchland dealer or Burchland Mfg. Inc. at 641-498-2063.

Product & Warranty Registration Card

Model: _____ Serial Number: _____

Owner's Name: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone number: _____

Date of purchase: _____

Name of dealer: _____

Customer Signature: _____

Date: _____

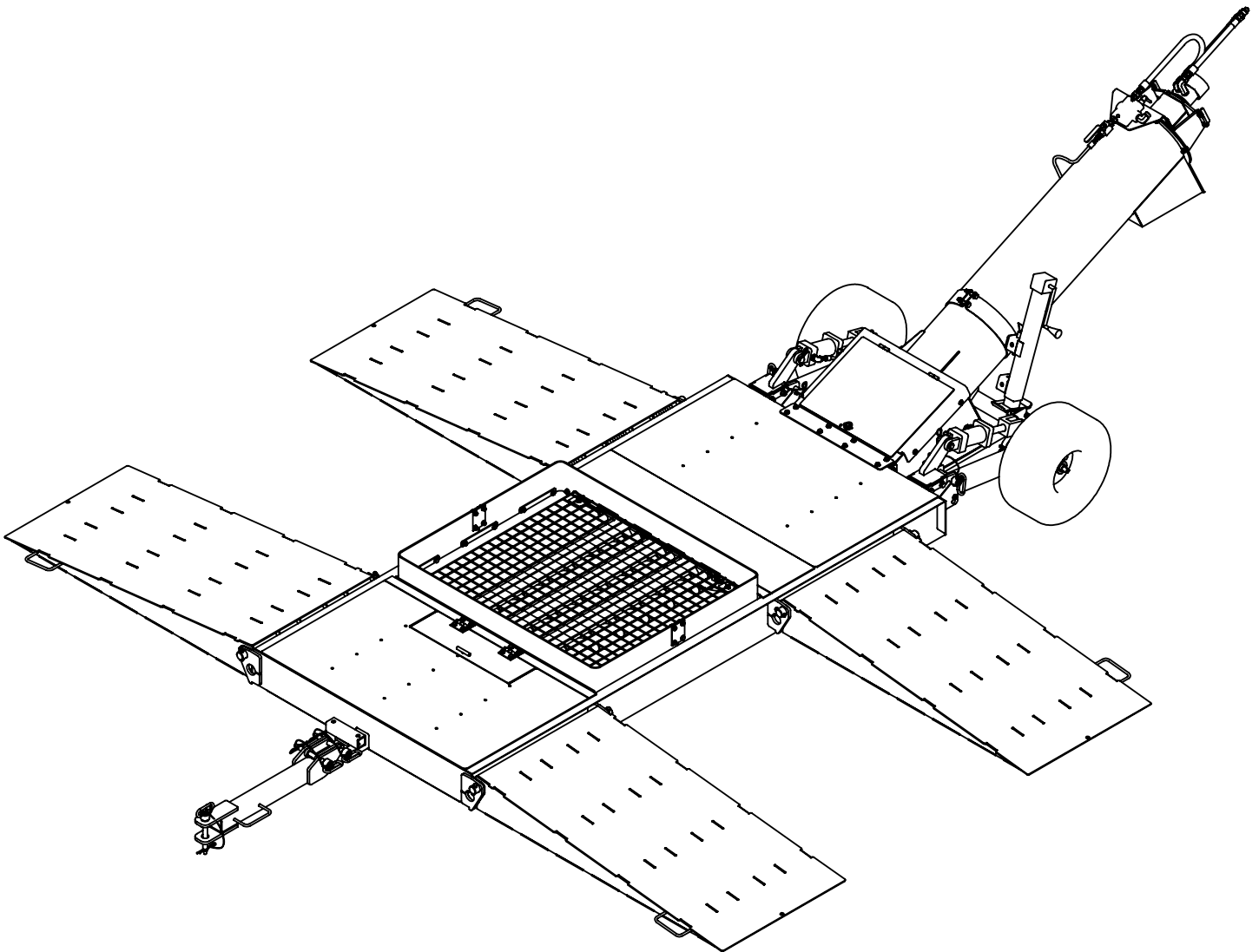
Please fill out and return this card with a copy of your sales receipt to:

Burchland Mfg. Inc.
3311 Yates Ave.
Gilman, IA 50106

BURCHLAND

GSX 100 / 130

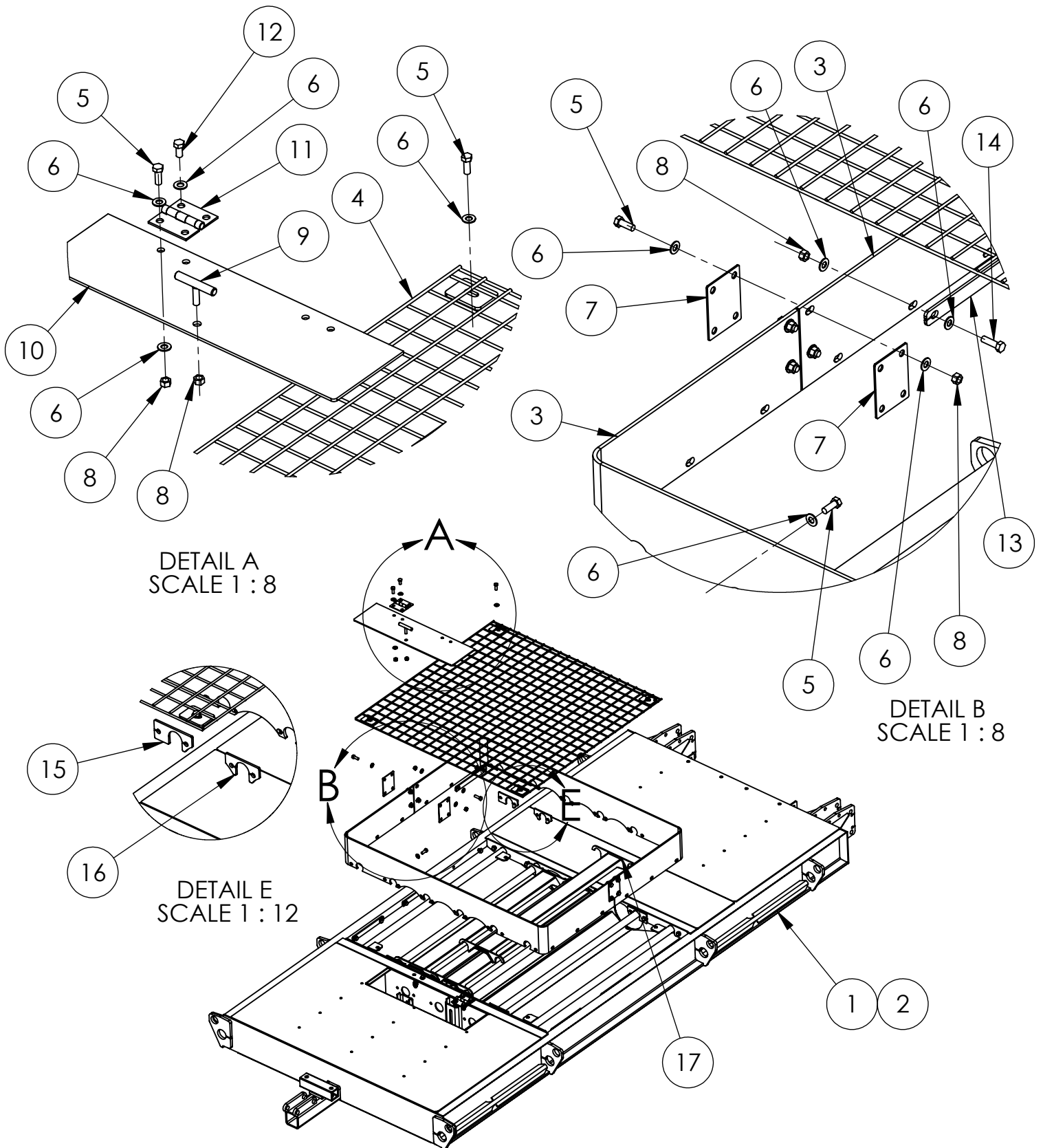
PARTS MANUAL



BURCHLAND
GSX ***DRIVE OVER HOPPERS***

BURCHLAND
GSX ***DRIVE OVER HOPPERS***

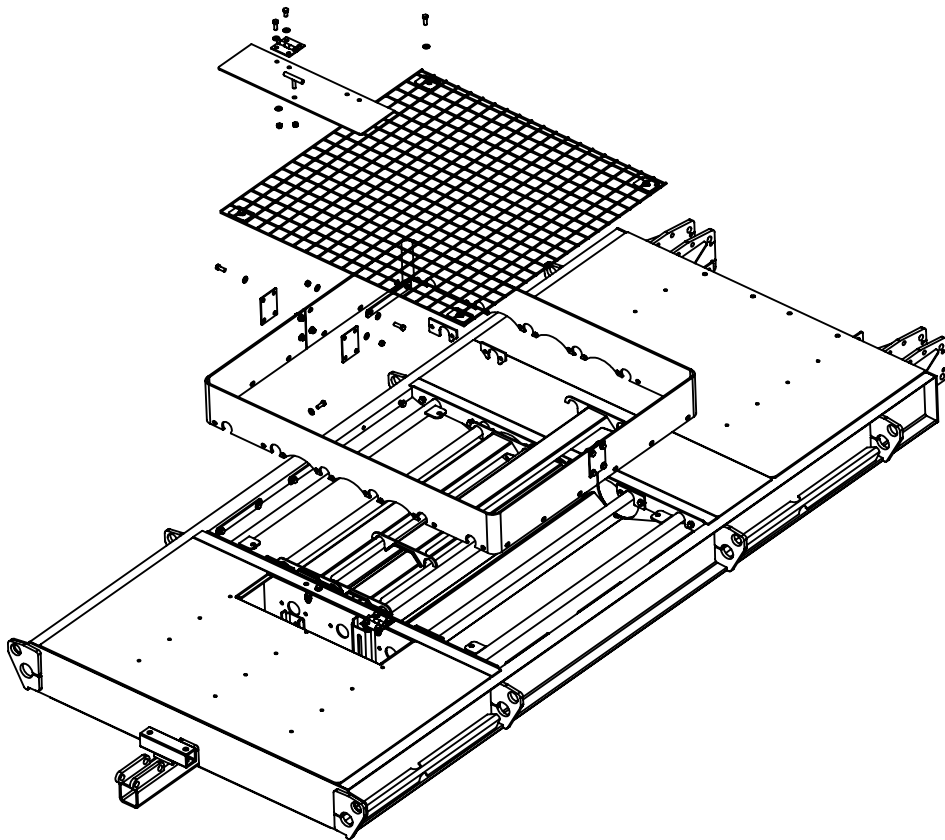
GSX-130 FRAME AND GUARD ASSEMBLY 12863 GSX-100 FRAME AND GUARD ASSEMBLY 12372



NOTE: SERIAL # ENDING IN #089 AND LATER

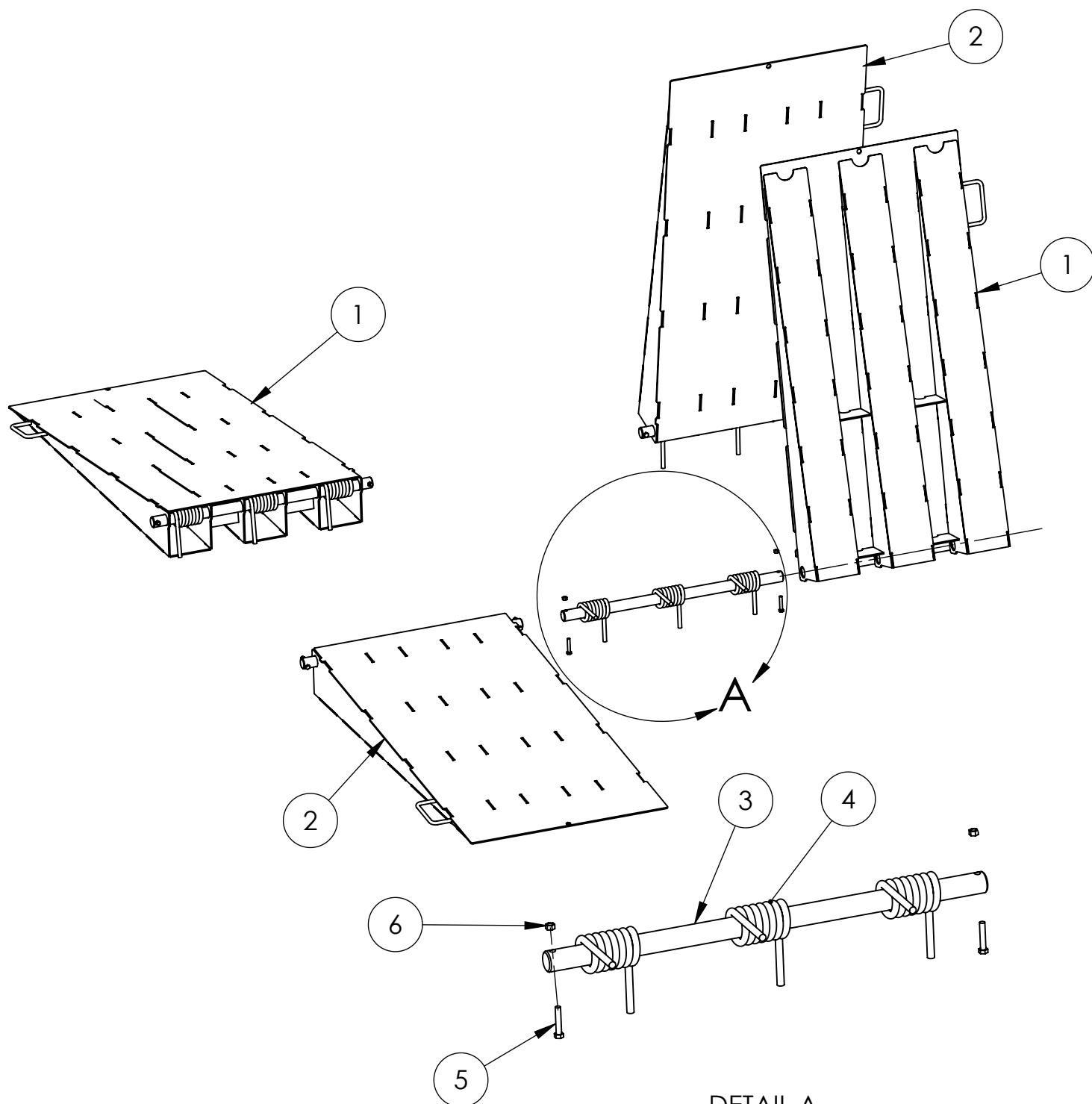
GSX-130 FRAME AND GUARD ASSEMBLY 12863
GSX-100 FRAME AND GUARD ASSEMBLY 12372

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12553	HOPPER FRAME, GSX 130	1
2	12647	HOPPER FRAME, GSX 100	
3	12315	RUBBER SKIRT, GSX	2
4	12248	HOPPER COVER, WIRE MESH	1
5	10112	BOLT, 3/8-16 X 1 GR8 ZY	36
6	10110	WASHER, 3/8 SAE GR8 ZY	76
7	12250	PLATE, RUBBER BELTING	4
8	10947	NUT, 3/8-16 SLTL GR8 ZY	25
9	12322	HANDLE, ACCESS COVER	1
10	12579	PLATE, ACCESS DOOR	1
11	12578	HINGE, 3 X 3 STEEL	2
12	10114	BOLT, 3/8-16 X .75 GR8 ZY	4
13	12881	PLATE, RUBBER SKIRT MOUNT	6
14	10113	BOLT, 3/8-16 X 1.25 GR8 ZY	12
15	12883	PLATE, RUBBER SKIRT WASHER	4
16	12882	PLATE, RUBBER SKIRT WASHER	4
17	13002	AUGER COVER	3



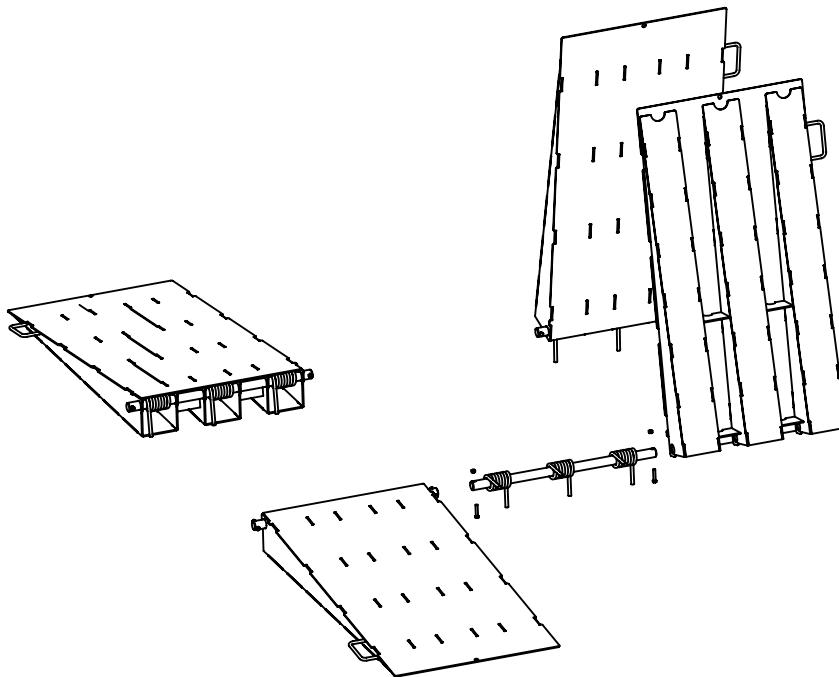
NOTE SERIAL # ENDING IN 089 AND LATER

GSX RAMP ASSY 12371

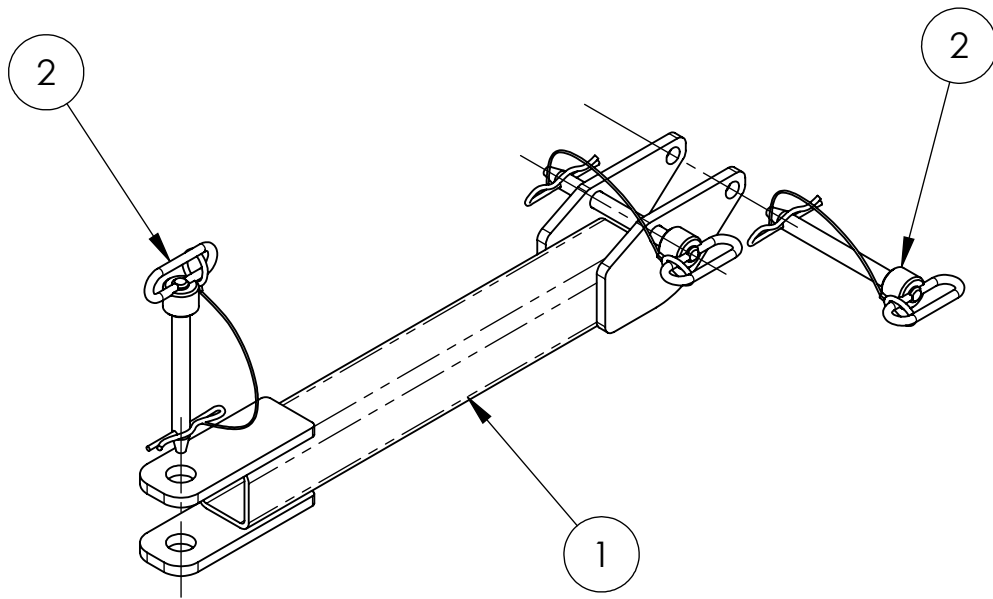


GSX RAMP ASSY 12371

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12364	HOPPER RAMP, RIGHT	2
2	12363	HOPPER RAMP, LEFT	2
3	12247	BAR, RAMP HINGE	4
4	12246 (B, 90deg)	RAMP SPRING	12
5	11126	BOLT, 3/8-16 X 2.0 GR8 ZY	8
6	10947	NUT, 3/8-16 SLTL GR8 ZY	8



GSX HITCH ASSY 12274

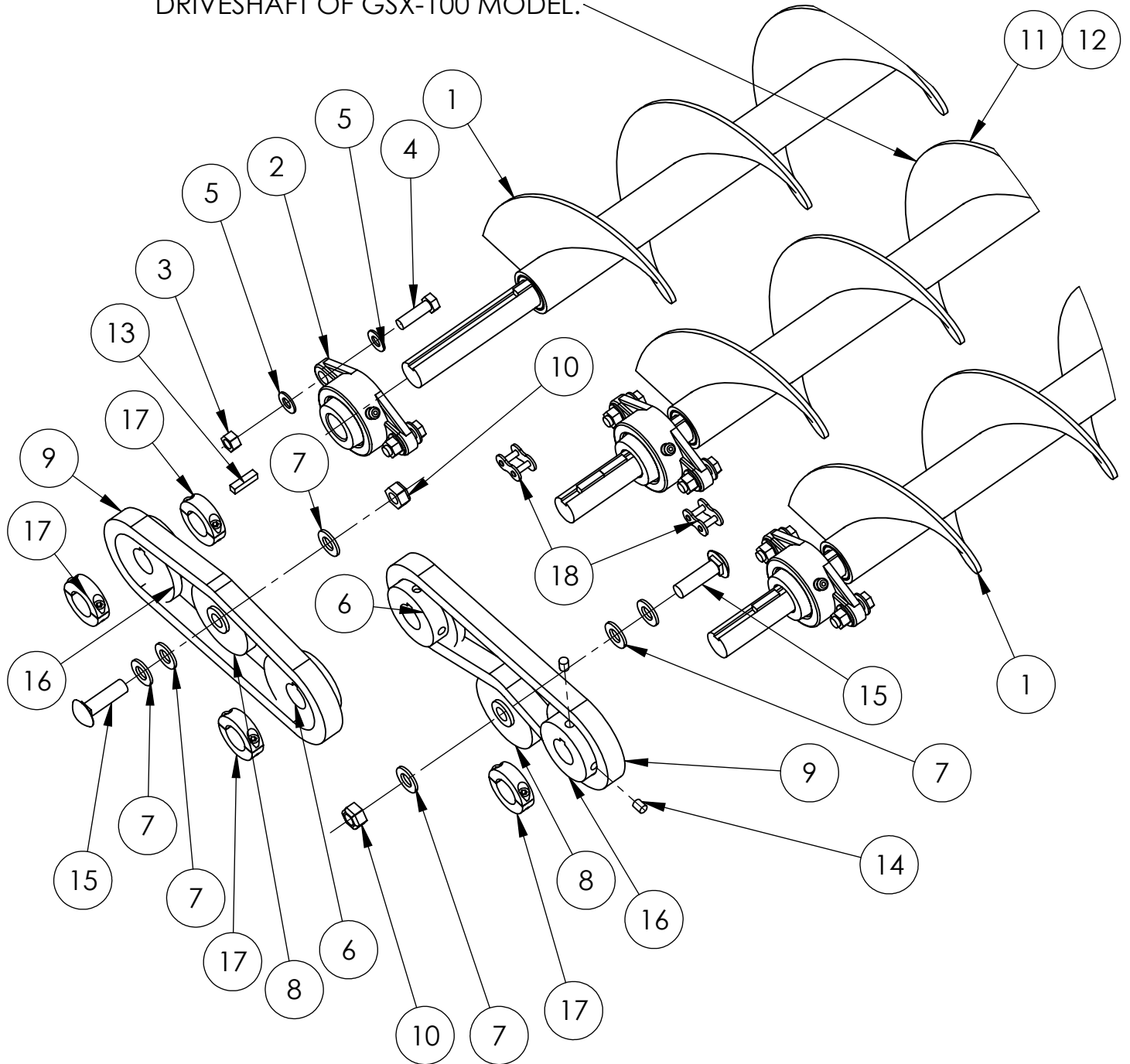


ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	11906	HOPPER TONGUE	1
2	12078	HITCHPIN W/ LANYARD 3/4 X 6 1/2	3

BURCHLAND
GSX *DRIVE OVER HOPPERS*

GSX-130 AUGER DRIVE ASSEMBLY 12590 GSX-100 AUGER DRIVE ASSEMBLY 12649

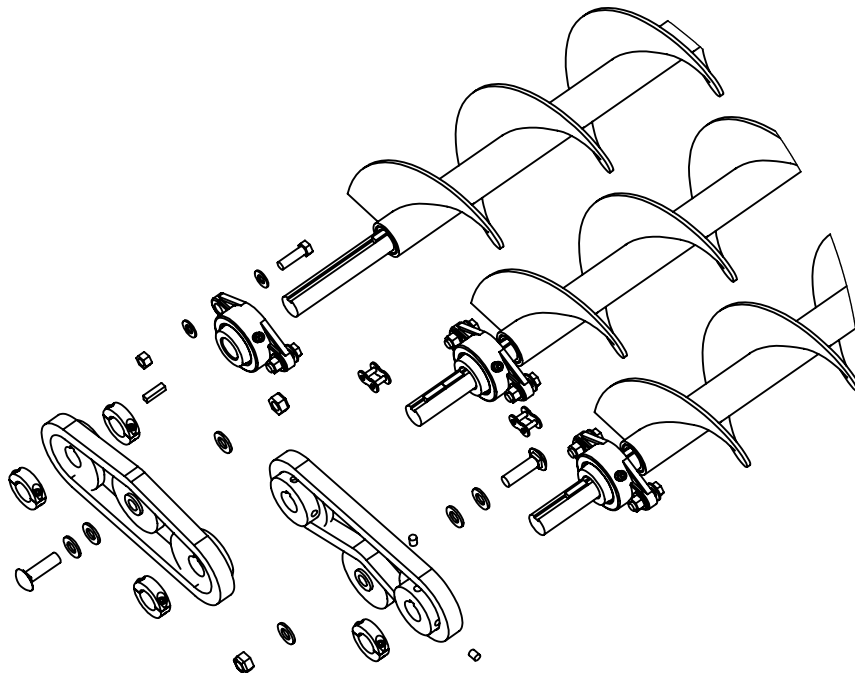
NOTE: NO FLIGHTING ON CENTER
DRIVESHAFT OF GSX-100 MODEL.



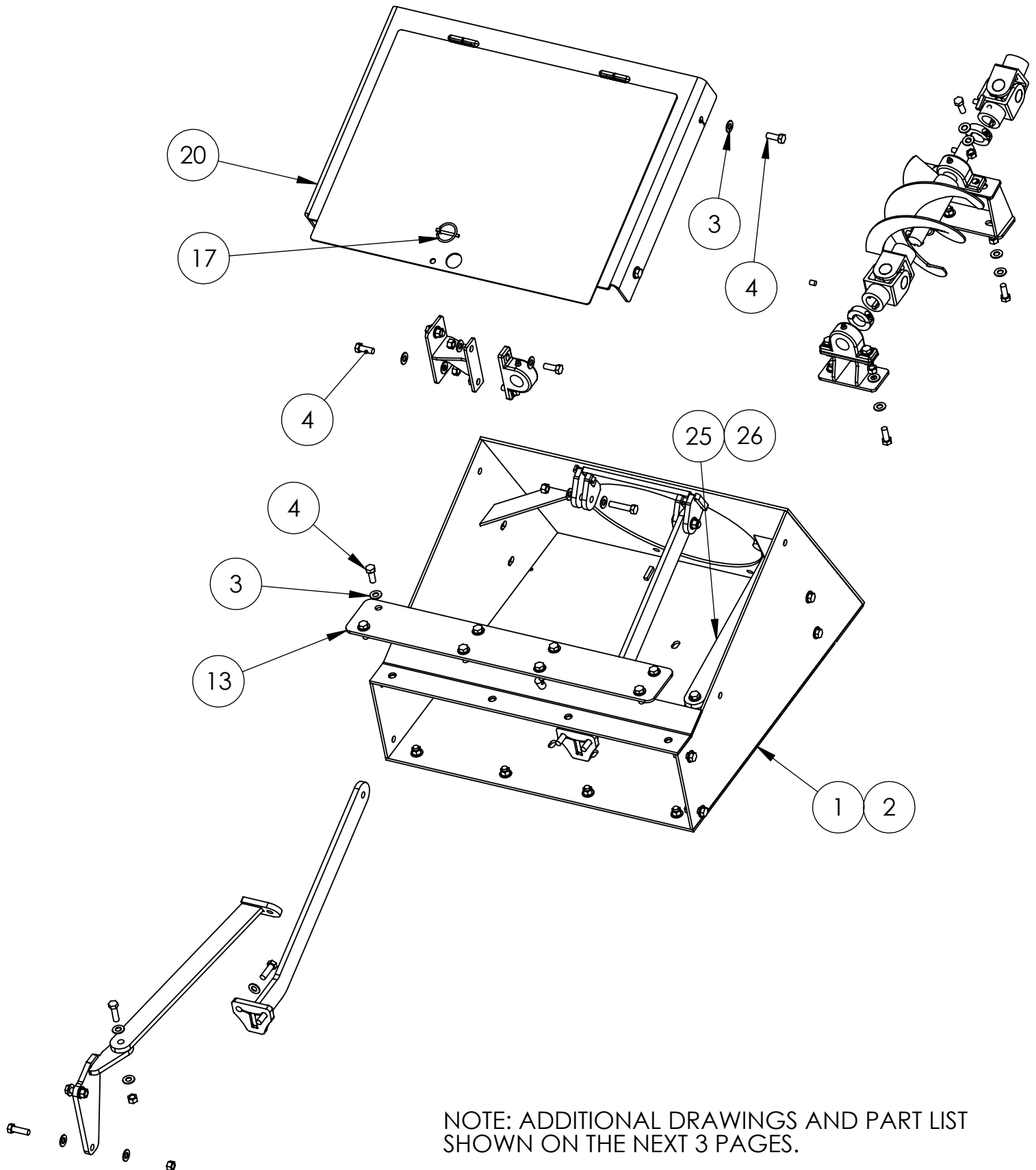
GSX-130 AUGER DRIVE ASSEMBLY 12590
GSX-100 AUGER DRIVE ASSEMBLY 12649

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12584	AUGER, 6" OD X 101"	2
2	12269	BEARING, 1.0 2-BOLT FLANGE	3
3	10947	NUT, 3/8-16 SLTL GR8 ZY	6
4	10113	BOLT, 3/8-16 X 1.25 GR8 ZY	6
5	10110	WASHER, 3/8 SAE GR8 ZY	12
6	12267	SPROCKET, #50, 15T, 1.0 BORE	2
7	10062	WASHER, 1/2 SAE GR8 ZY	6
8	12026	IDLER SPROCKET, 5013	2
9	12379	ROLLER CHAIN, #50 X 39 LINK	2
10	10396	NUT, 1/2-13, SLTL GR8 ZY	2
* 11	12587	AUGER, 6" OD X 87.25	1
12	12650	DRIVESHAFT, GSX-100	1
13	12279	KEYSTOCK, 1/4 X 1/4 X 1.0	4
14	12393	SETSCREW, 5/16-18 X 3/8, KNURLED CUP	8
15	12908	BOLT, 1/2-13 X 1.75 CARRIAGE	2
16	13294	SPROCKET, #50, 13T, 1.0 BORE	2
17	13287	COLLAR, 1.0 ID, 2 PIECE SPLIT	4
18	12330	CONNECTING LINK, #50	2

* USE ITEM #11 ON GSX-130, USE ITEM #12 ON GSX-100



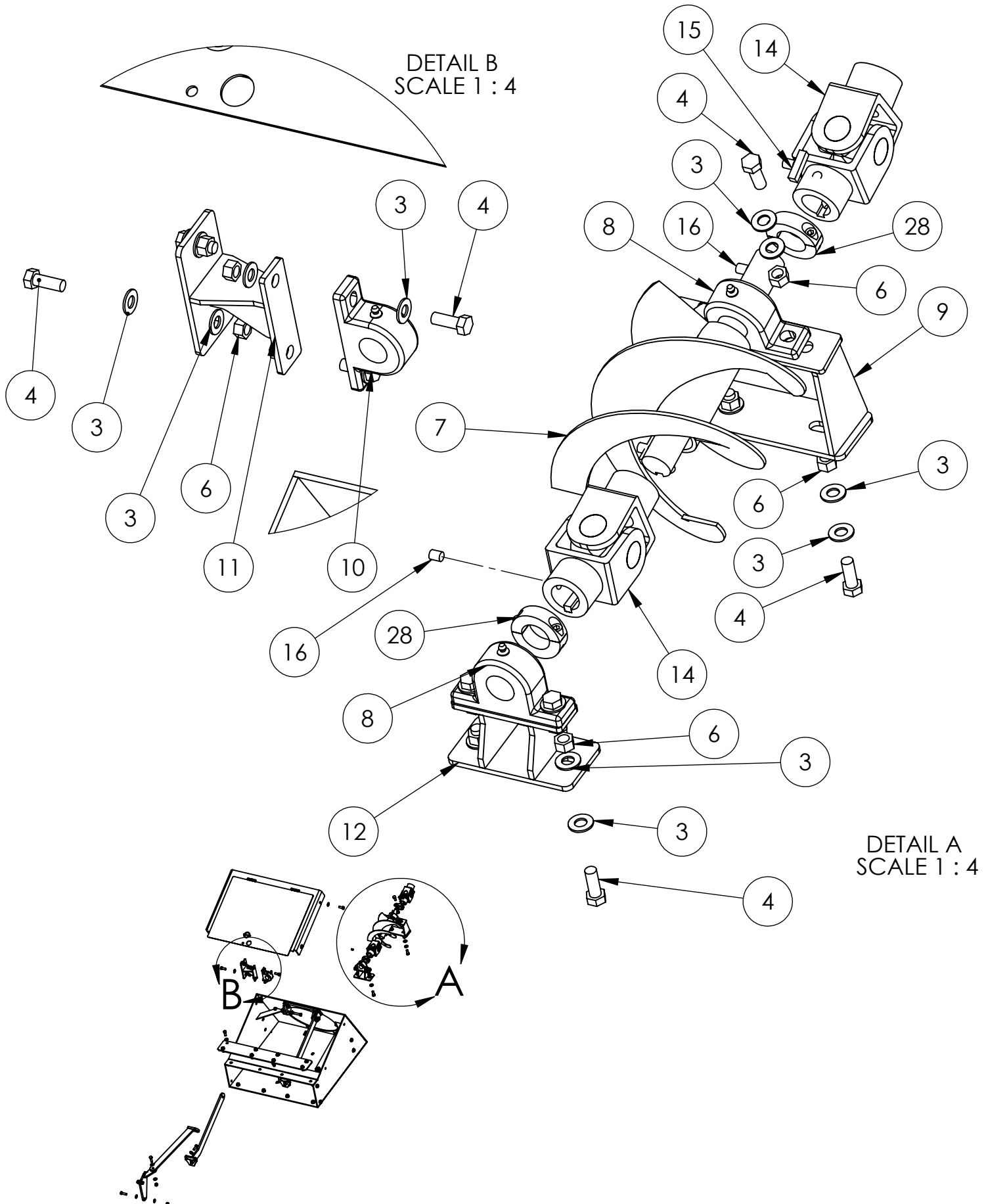
GSX 130 JUNCTION BOX ASSEMBLY 12860
GSX 100 JUNCTION BOX ASSEMBLY 12271



NOTE: ADDITIONAL DRAWINGS AND PART LIST
SHOWN ON THE NEXT 3 PAGES.

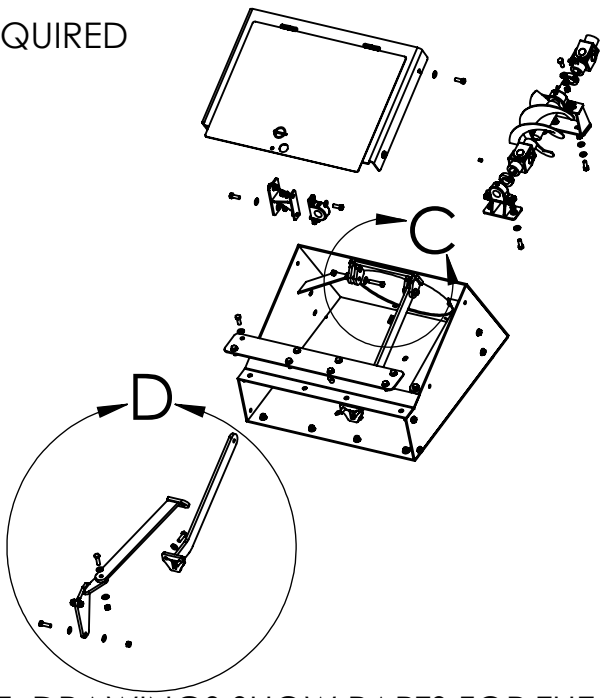
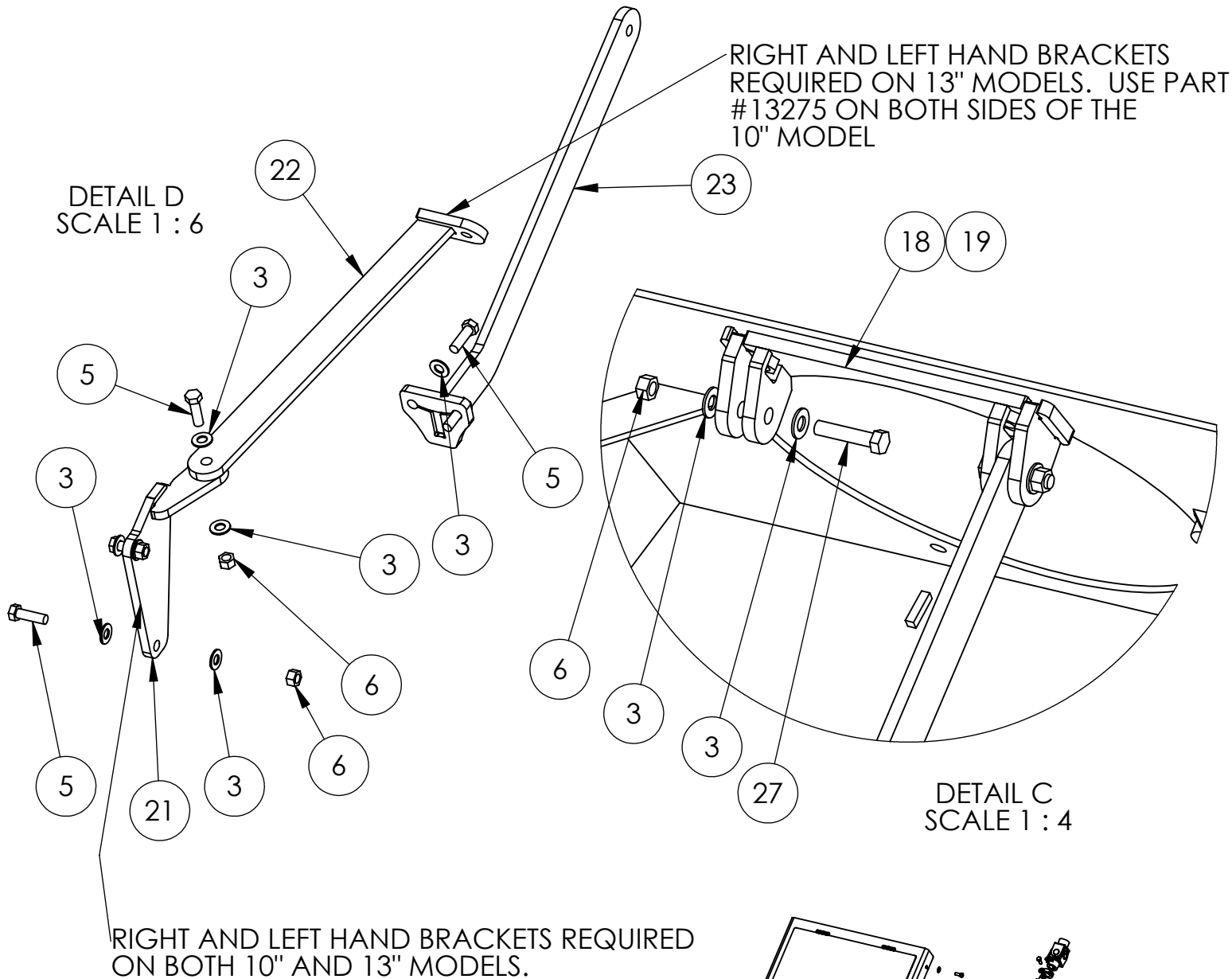
NOTE: DRAWINGS SHOW PARTS FOR THE 13" MODEL

GSX 130 JUNCTION BOX ASSEMBLY 12860
GSX 100 JUNCTION BOX ASSEMBLY 12271



NOTE: DRAWINGS SHOW PARTS FOR THE 13" MODEL

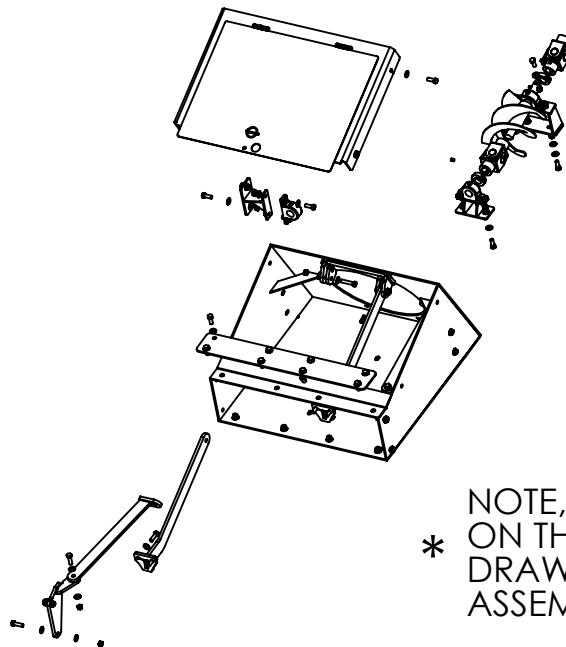
GSX 130 JUNCTION BOX ASSEMBLY 12860
GSX 100 JUNCTION BOX ASSEMBLY 12271



NOTE: DRAWINGS SHOW PARTS FOR THE 13" MODEL

GSX 130 JUNCTION BOX ASSEMBLY 12860
GSX 100 JUNCTION BOX ASSEMBLY 12271

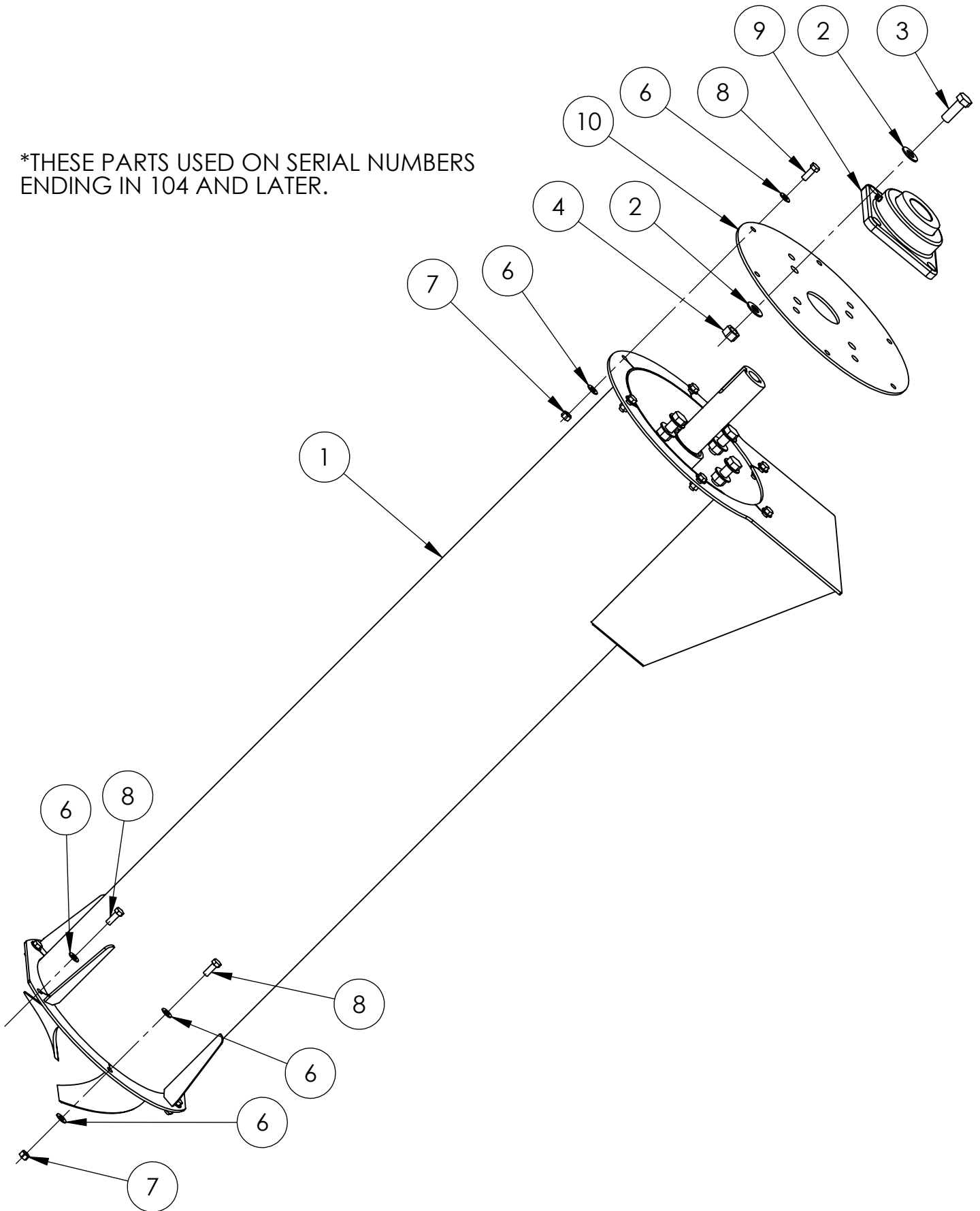
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	
1	12286	JUNCTION BOX, 13"	1	
2	12042	JUNCTION BOX, 10"	1	*
3	10110	WASHER, 3/8 SAE GR8 ZY	77	
4	10112	BOLT, 3/8-16 X 1 GR8 ZY	32	
5	10113	BOLT, 3/8-16 X 1.25 GR8 ZY	10	
6	10947	NUT, 3/8-16 SLTL GR8 ZY	32	
7	11937	AUGER, 6" U-JOINT	1	
8	12655	BEARING, 1.0 BRONZE, ZERK 0	2	
9	12646	BEARING MOUNT BRACKET	1	
10	12656	BEARING, 1.0 BRONZE, ZERK 90	2	
11	12638	AUGER MOUNT, SIDE	2	
12	12643	AUGER MOUNT, BOTTOM	1	
13	12239	PLATE, BOX SUPPORT	1	
14	12266	U-JOINT ASSY, 1.0 X 1.0	2	
15	12279	KEYSTOCK, 1/4 X 1/4 X 1.0	4	
16	12393	SETSCREW, 5/16-18 X 3/8, KNURLED CUP	8	
17	10124	LYNCHPIN, 3/16	1	
18	13258	AUGER SUPPORT BRK., 130	1	
19	13270	AUGER SUPPORT BRACKET, 100	1	*
20	12674	JUNCTION BOX COVER	1	
21	13273	BRACKET, RIGHT SUPPORT	1	
22	13297	BRACKET, RIGHT SUPPORT, 130	1	
23	13267	AUGER SUPPORT BRACKET	2	
24	13293	BRACKET, LEFT SUPPORT	1	
25	13298	BRACKET, LEFT SUPPORT, 130	1	
26	13275	PLATE, 100 SUPPORT BAR	2	*
27	10135	BOLT, 3/8-16 X 1.75 GR8 ZY	2	
28	13287	COLLAR, 1.0 ID, 2 PIECE SPLIT	2	



* NOTE, THESE ITEMS ARE USED ON THE 10" ASSEMBLY ONLY, #12271. DRAWINGS SHOW ITEMS IN THE 13" ASSEMBLY, #12860.

DISCHARGE AUGER ASSEMBLY, 130, 13093

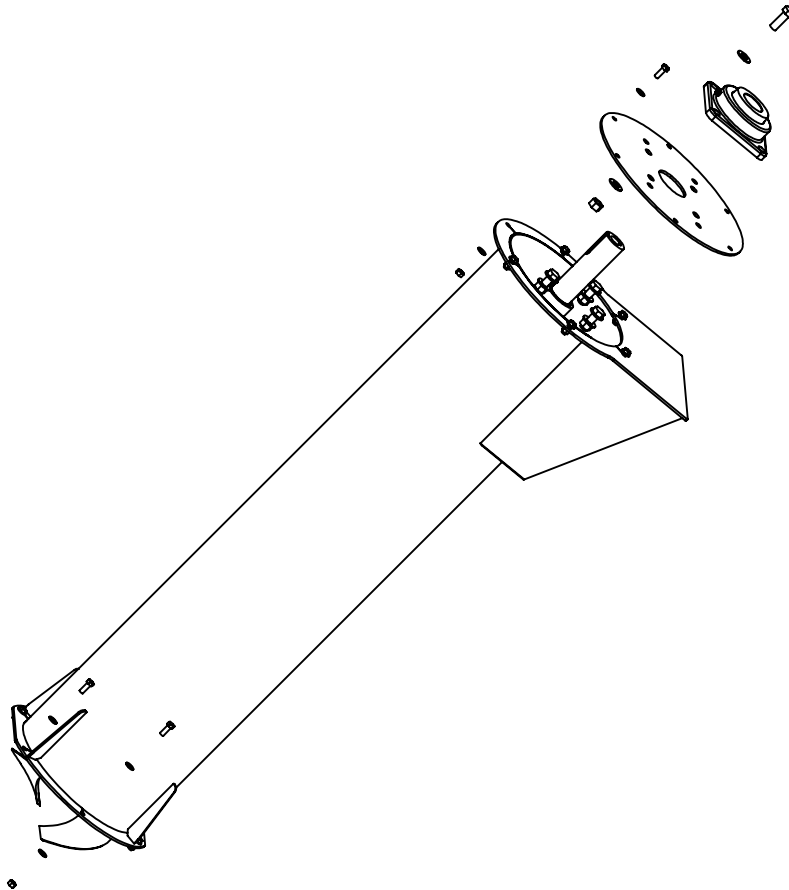
*THESE PARTS USED ON SERIAL NUMBERS
ENDING IN 104 AND LATER.



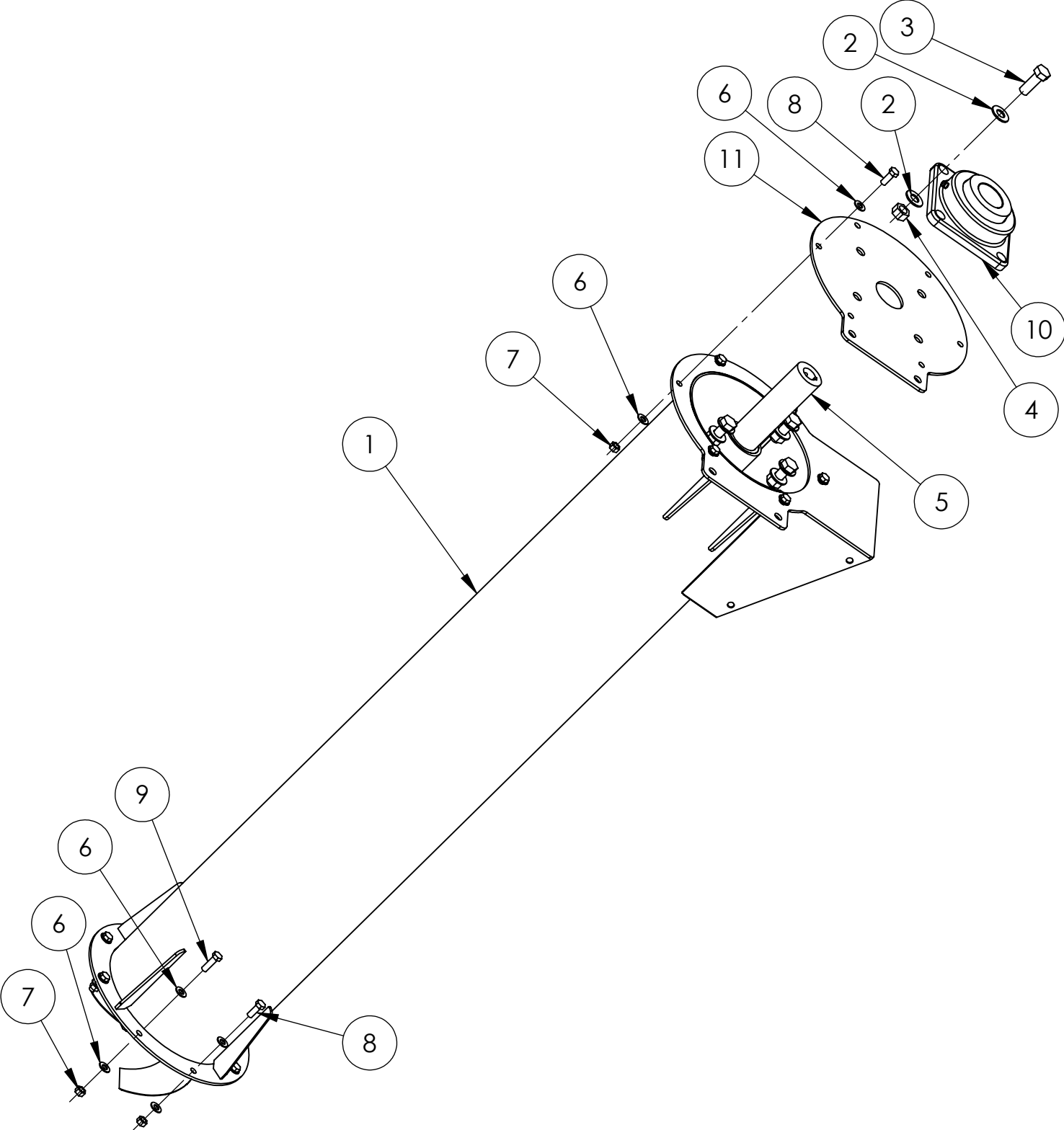
DISCHARGE AUGER ASSEMBLY, 130, 13093

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	13044	DISCHARGE TUBE, GSX 130	1
2	10104	WASHER, 5/8 GR8 ZY	8
3	12258	BOLT, 5/8-11 X 1.75 GR8 ZY	4
4	10105	NUT, 5/8-11 SLTL GR8 ZY	4
5	13094	LIFT AUGER, GSX 130	1
6	10110	WASHER, 3/8 SAE GR8 ZY	22
7	10947	NUT, 3/8-16 SLTL GR8 ZY	10
8	10112	BOLT, 3/8-16 X 1 GR8 ZY	12
9	12268	BEARING, 2.0 4 BOLT FLANGE	1
10	12568	PLATE, DISCHARGE END, 130	1

*THESE PARTS USED ON SERIAL NUMBERS
ENDING IN 104 AND LATER.

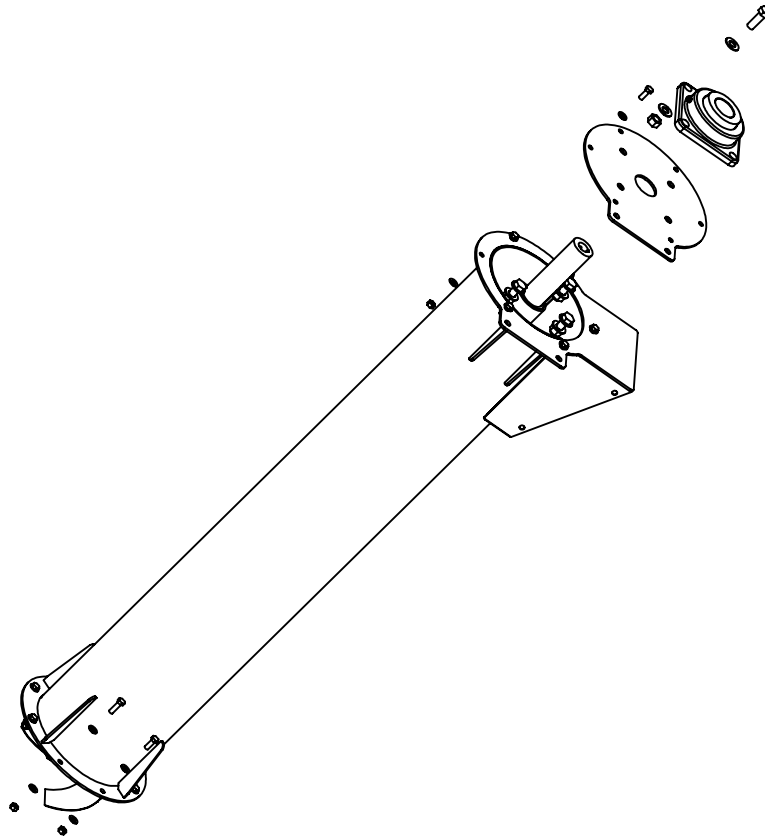


DISCHARGE AUGER ASSEMBLY, 100, 12654

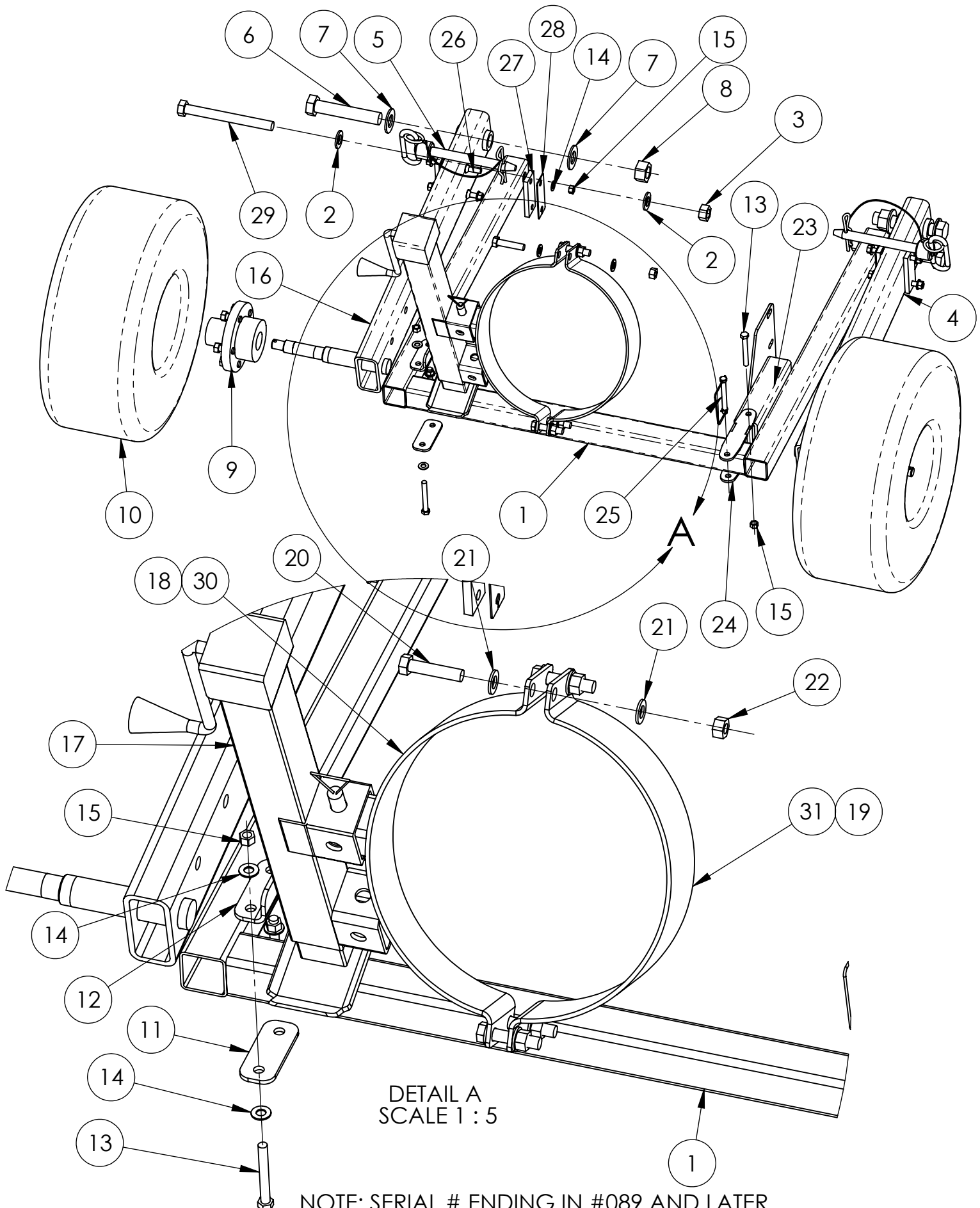


DISCHARGE AUGER ASSEMBLY, 100, 12654

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12652	DISCHARGE TUBE, GSX 100	1
2	10104	WASHER, 5/8 GR8 ZY	8
3	12258	BOLT, 5/8-11 X 1.75 GR8 ZY	4
4	10105	NUT, 5/8-11 SLTL GR8 ZY	4
5	12034	LIFT AUGER, 9"	1
6	10110	WASHER, 3/8 SAE GR8 ZY	28
7	10947	NUT, 3/8-16 SLTL GR8 ZY	14
8	10112	BOLT, 3/8-16 X 1 GR8 ZY	10
9	10113	BOLT, 3/8-16 X 1.25 GR8 ZY	4
10	12268	BEARING, 2.0 4 BOLT FLANGE	1
11	12653	PLATE, DISCHARGE END, 100	1



GSX 130 TRANSPORT ASSEMBLY 12864
GSX 100 TRANSPORT ASSEMBLY 12391



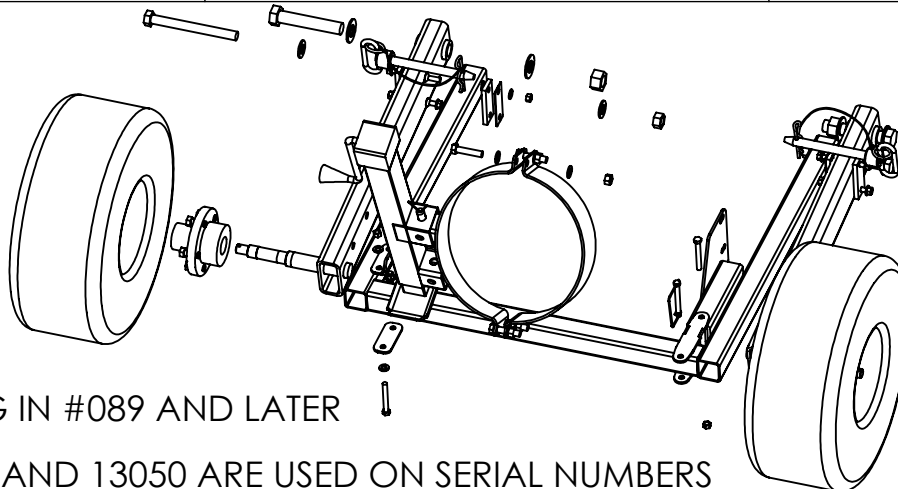
DETAIL A
SCALE 1 : 5

NOTE: SERIAL # ENDING IN #089 AND LATER

NOTE: ITEMS 30 AND 31 CHANGE ON SERIAL NUMBERS ENDING IN 104 AND LATER

GSX 130 TRANSPORT ASSEMBLY 12864
GSX 100 TRANSPORT ASSEMBLY 12391

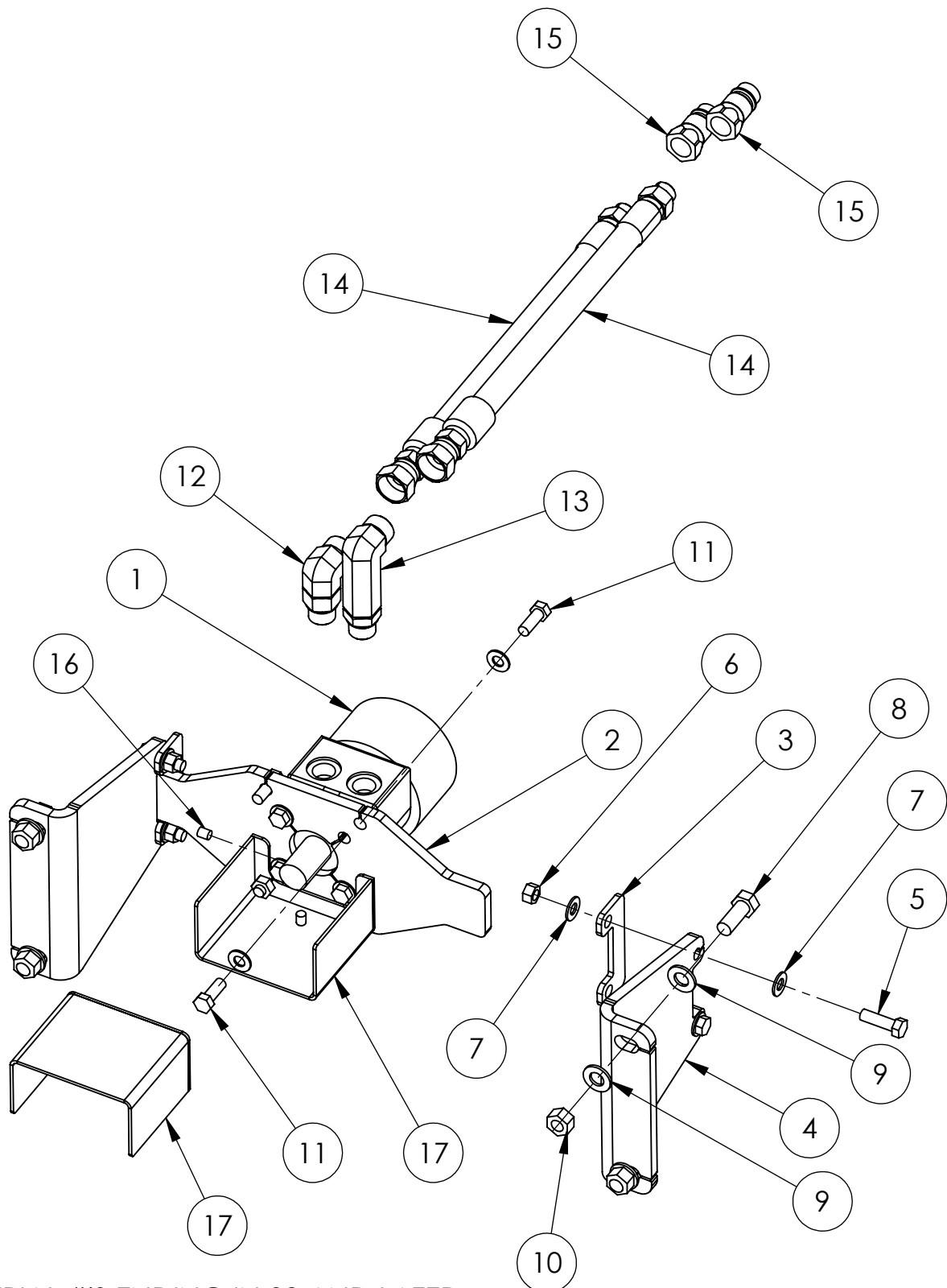
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12254	JACK STABILIZER BAR	1
2	10107	WASHER, 3/4 GR8 ZY	4
3	12260	NUT - 3/4-16 HEX LOCK GR8 ZY	2
4	12390	WHEEL MOUNT RIGHT	1
5	12078	HITCHPIN W/ LANYARD 3/4 X 6 1/2	2
6	13017	BOLT, 1-8 X 5.5 GR8 ZY	2
7	10679	WASHER, 1" SAE GR8 ZY	4
8	10678	NUT, 1-8 TL GR8 ZY	2
9	12301	WHEEL HUB ASSY, 5-BOLT	2
10	12302	WHEEL & TIRE COMBO 5-BOLT	2
11	12370	PLATE, BOLT MOUNT	1
12	12369	PLATE, JACK STOP	1
13	12389	BOLT, 3/8-16 X 3 GR8 ZY	3
14	10110	WASHER, 3/8 SAE GR8 ZY	12
15	10947	NUT, 3/8-16 SLTL GR8 ZY	11
16	11897	WHEEL MOUNT, LEFT	1
17	12263	GSX JACK	1
18	12253	JACK MOUNT, GSX 100	
19	12387	PLATE, 10 AUGER BAND	
20	10397	BOLT, 1/2-13 X 2.25 GR8 ZY	4
21	10062	WASHER, 1/2 SAE GR8 ZY	8
22	10395	NUT, 1/2-13 GR8 HEX ZY	4
23	12576	BRACKET, LOCK PIVOT	1
24	12573	LOCK BRACKET	1
25	10122	PTO PIN, 3/8 X 3	1
26	13006	CAP SCREW, 3/8-16 X 1.25 CTRSK GR8 ZY	8
27	12975	BAR, WHEEL TUBE SHIM	4
28	13005	PLATE, SHIM	2
29	12664	BOLT, 3/4-10 X 7.5 GR8 ZY	2
30	13095	JACK MOUNT, GSX 130, 12.75	1
31	13050	PLATE, 12.75 AUGER BAND	1



NOTE: SERIAL # ENDING IN #089 AND LATER

* PART NUMBERS 13095 AND 13050 ARE USED ON SERIAL NUMBERS
ENDING IN 104 AND LATER

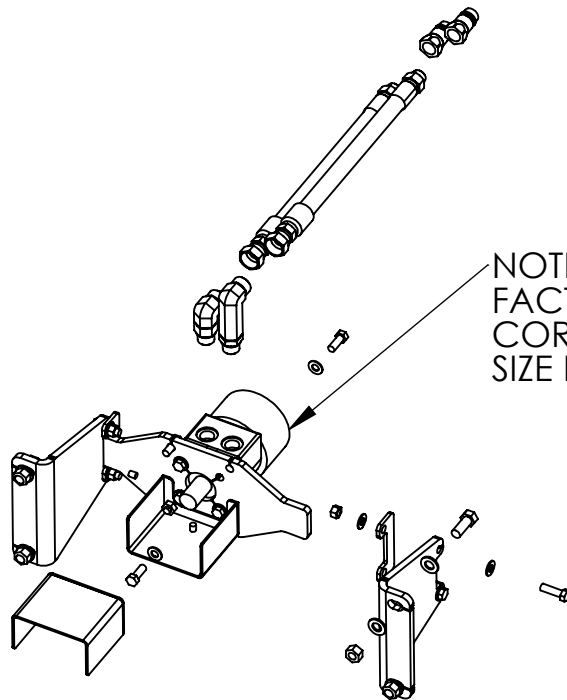
GSX HYDRAULIC DRIVE ASSEMBLY, 12976



*NOTE: SERIAL #'S ENDING IN 89 AND LATER
HOSES AND FITTINGS WERE CHANGED FROM 1/2"
TO 5/8" ON SERIAL #'S 100 AND LATER

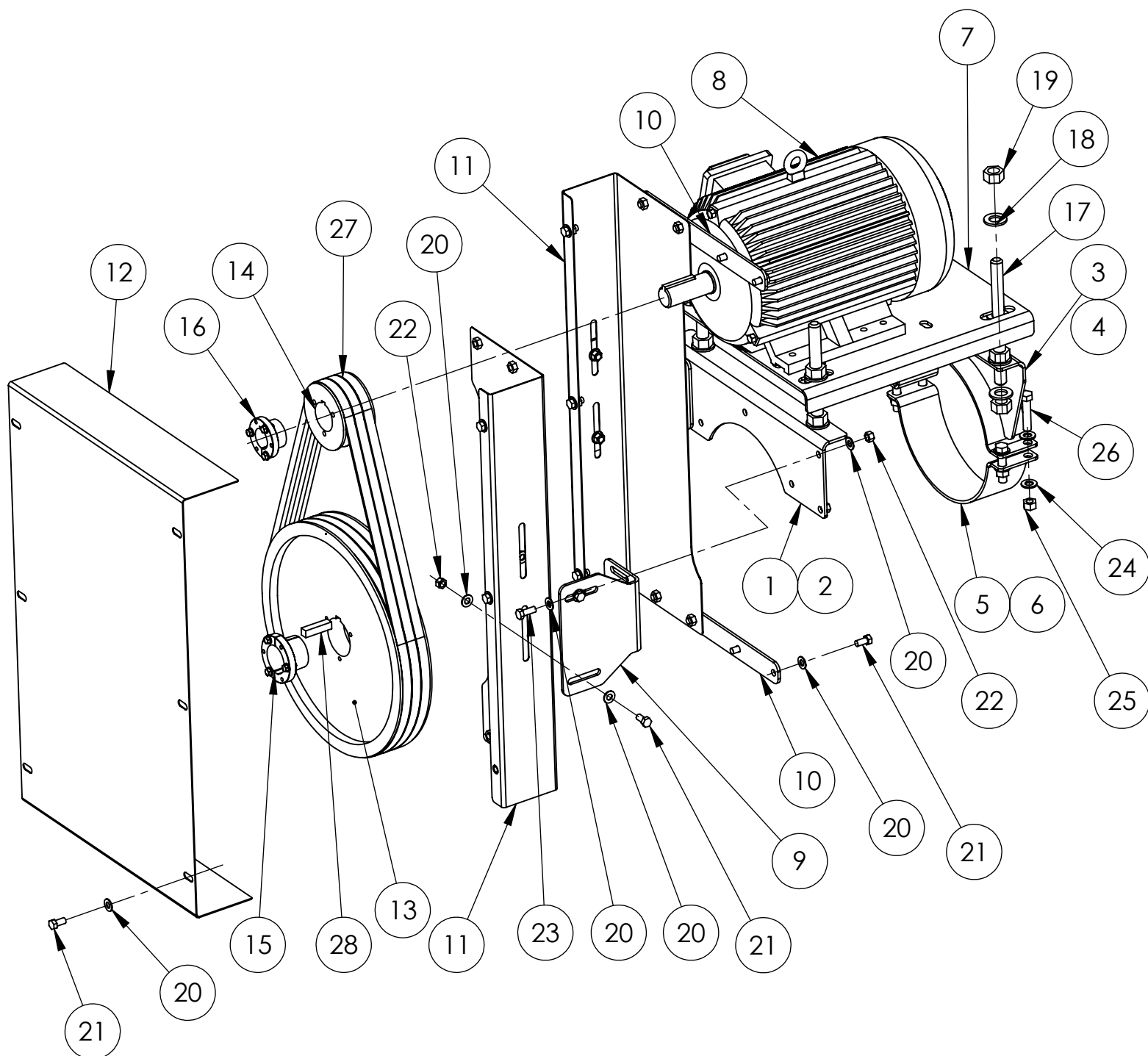
GSX HYDRAULIC DRIVE ASSEMBLY, 12976

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12265	HYD MOTOR, 8.8 CID	1
2	12977	PLATE, TORQUE ARM	1
3	11855	PLATE, TORQUE ARM CATCH	2
4	11854	PLATE, TORQUE ARM STOP	2
5	10113	BOLT, 3/8-16 X 1.25 GR8 ZY	4
6	10947	NUT, 3/8-16 SLTL GR8 ZY	4
7	10110	WASHER, 3/8 SAE GR8 ZY	16
8	10433	BOLT, 1/2-13 X 1.25 GR8 ZY	4
9	10062	WASHER, 1/2 SAE GR8 ZY	8
10	10395	NUT, 1/2-13 GR8 HEX ZY	4
11	10112	BOLT, 3/8-16 X 1 GR8 ZY	8
12	13019	HYD FITTING, 10MORB X 10ORFS 90	1
13	13052	HYD FITTING, 10MORB X 10ORFS 90 LONG	1
14	13018	HYD HOSE, 5/8 X 20', 10FORFS X 8MORB ST.	2
15	10540	AG QUICK COUPLER, 8 ORB F	2
16	12393	SETSCREW, 5/16-18 X 3/8, KNURLED CUP	2
17	12980	SHAFT COVER	2



NOTE: CONSULT WITH THE
FACTORY TO DETERMINE THE
CORRECT HYDRAULIC MOTOR
SIZE BEFORE ORDERING.

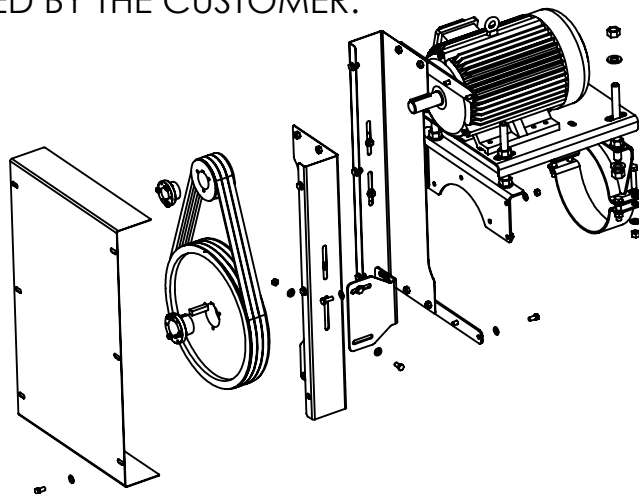
GSX 100 ELECTRIC DRIVE ASSEMBLY, 12810
GSX 130 ELECTRIC DRIVE ASSEMBLY, 12911



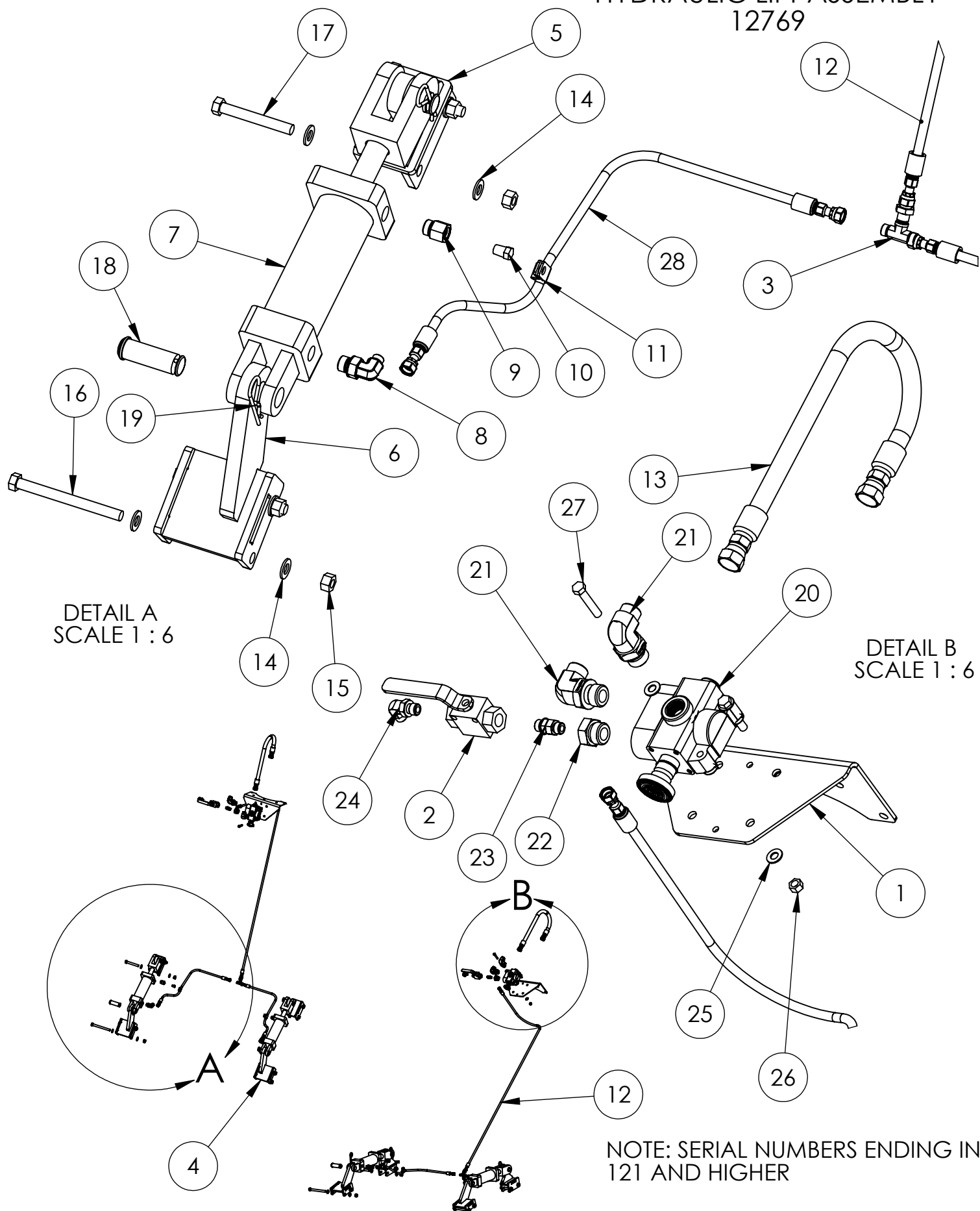
GSX 100 ELECTRIC DRIVE ASSEMBLY, 12810
GSX 130 ELECTRIC DRIVE ASSEMBLY, 12911

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12742	PLATE, 10" MOTOR MOUNT	1
2	12744	PLATE, 13" MOTOR MOUNT	
3	12332	BRACKET, REAR MOTOR, 100	1
4	13318	REAR MOTOR MOUNT, 130	
5	12387	PLATE, 10 AUGER BAND	1
6	13050	PLATE, 12.75 AUGER BAND	
7	12367	ELECTRIC MOTOR MOUNT	1
8	*	ELECTRIC MOTOR, CUSTOMER PROVIDED	1
9	12747	PLATE, BELT GUARD MOUNT	2
10	12748	PLATE, BELT GUARD JOIN	2
11	12782	BACK BELT GUARD	2
12	12749	PLATE, FRONT BELT GUARD	1
13	12397*	SHEAVE, 15.4 PD, AB 3 GROOVE QD	1
14	12515*	SHEAVE, 4.2 PD, AB 3 GROOVE QD	1
15	12517	QD BUSHING, SK 2.00 SHAFT	1
16	12399	QD BUSHING, SH 1.375 SHAFT	1
17	12911	ALL THREAD, 3/4-10 X 9.0	4
18	10107	WASHER, 3/4 GR8 ZY	16
19	10632	NUT, 3/4-10 GR8 ZY	16
20	10110	WASHER, 3/8 SAE GR8 ZY	30
21	10114	BOLT, 3/8-16 X .75 GR8 ZY	18
22	10947	NUT, 3/8-16 SLTL GR8 ZY	8
23	10112	BOLT, 3/8-16 X 1 GR8 ZY	4
24	10062	WASHER, 1/2 SAE GR8 ZY	8
25	10395	NUT, 1/2-13 GR8 HEX ZY	4
26	10397	BOLT, 1/2-13 X 2.25 GR8 ZY	4
27	12402	V-BELT, BX60	3
28	13325	KEYSTOCK, 1/2 X 1/2 X 2.0	1

*** NOTE, SHEAVE SIZES CAN VARY DEPENDING ON DESIRED AUGER RPM. QD BUSHING SIZES CAN VARY DEPENDING ON MOTOR SHAFT DIAMETER. PLEASE CALL THE FACTORY BEFORE ORDERING SHEAVES, BUSHINGS OR BELTS. THE ELECTRIC MOTOR IS PROVIDED BY THE CUSTOMER.



HYDRAULIC LIFT ASSEMBLY 12769



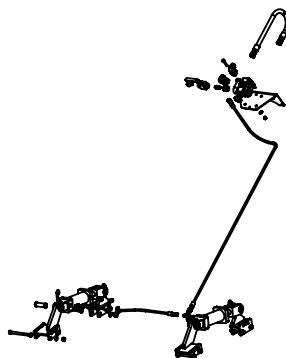
DETAIL A
SCALE 1 : 6

DETAIL B
SCALE 1 : 6

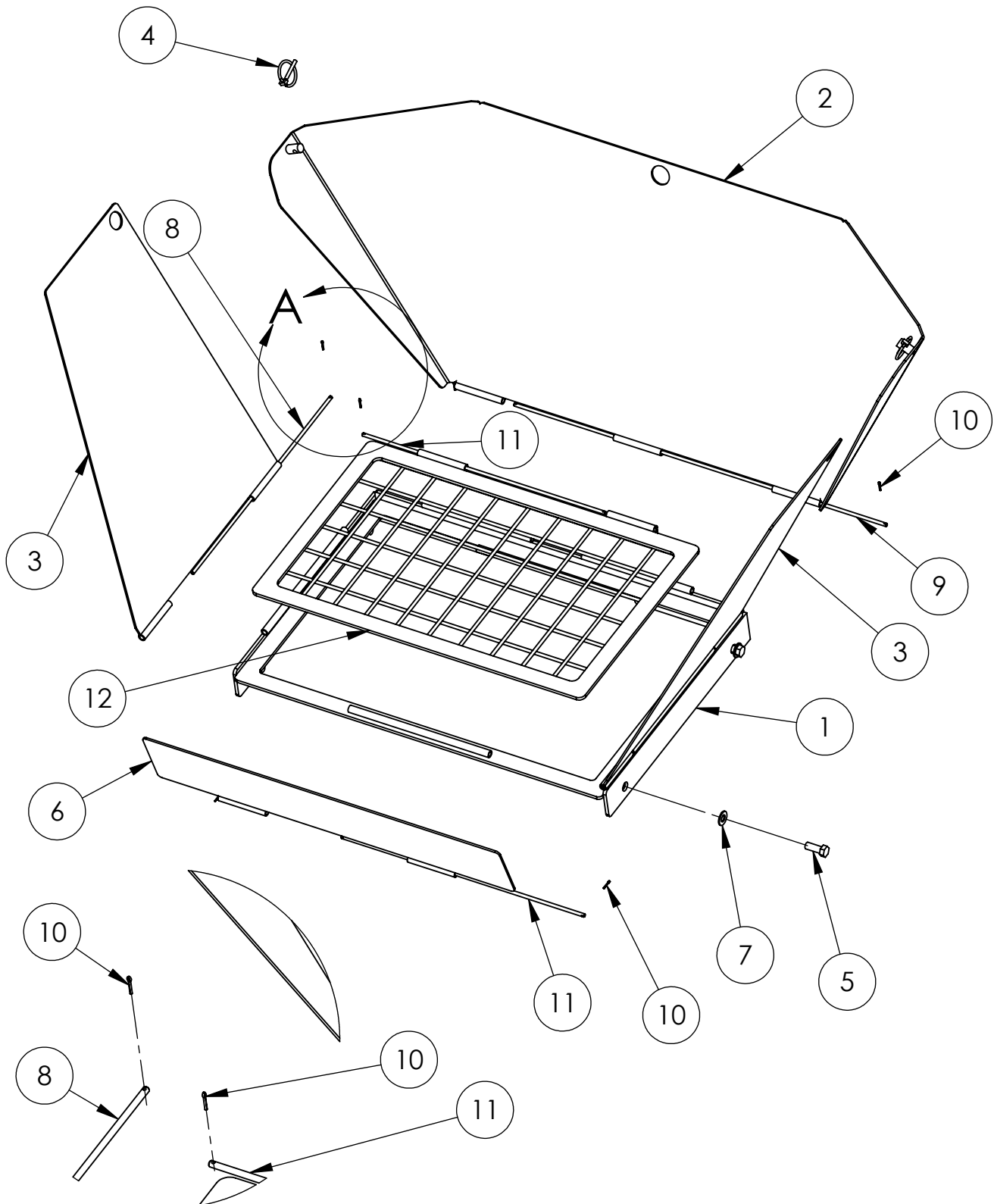
NOTE: SERIAL NUMBERS ENDING IN
121 AND HIGHER

HYDRAULIC LIFT ASSEMBLY 12769

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12756	PLATE, VALVE MOUNT	1
2	12739	VALVE, HIGH PRES. BALL	1
3	12762	HYD FITTING, 4M ORFS BLK UNION TEE	1
4	12428	CYL MOUNT BRACKET, LEFT	1
5	12431	CYLINDER MOUNT BRACKET	2
6	12763	CYL MOUNT BRACKET, RIGHT	1
7	12764	HYD CYLINDER, 2.5 X 4	2
8	12765	HYD FITTING, 4M ORFS X 8M ORB 90	2
9	12767	HYD FITTING, 8M ORB X 1/4 NPTF	2
10	12768	HYD FITTING, BREATHER VENT, 1/4 NPT	2
11	12771	HOSE P-CLAMP, 9/16, 13/32 HOLE	2
12	12783-A	HYD HOSE, 1/4 X 67, 4 FFOR ST, 3000	1
13	13081	HOSE, 5/8X 28 10FFOR ST, 3000	1
14	10062	WASHER, 1/2 SAE GR8 ZY	16
15	10395	NUT, 1/2-13 GR8 HEX ZY	8
16	12524	BOLT, 1/2-13 X 5.5 GR8 ZY	4
17	11617	BOLT, 1/2-13 X 3.75 GR8 ZY	4
18	12872	PIN, 1.0 X 2.5	4
19	12873	HAIRPIN CLIP, 5/32 X 3	4
20	13305	VALVE, SELECTOR, #12 PORTS	1
21	13320	HYD FITTING, 10 ORFS X 12 MORB 90	2
22	13321	HYD FITTING, 12MORB X 6FORB ST.	1
23	13322	HYD FITTING, 6MORB ADJ. UNION	1
24	13323	HYD FITTING, 4 ORFS X 6 MORB 90	1
25	10110	WASHER, 3/8 SAE GR8 ZY	4
26	10947	NUT, 3/8-16 SLTL GR8 ZY	2
27	11126	BOLT, 3/8-16 X 2.0 GR8 ZY	2
28	13346	HYD HOSE, 1/4 X 28, 4FFOR ST, 3000	2



GSX SIDE CHUTE ASSEMBLY, 12861



DETAIL A
SCALE 1 : 4

GSX SIDE CHUTE ASSEMBLY, 12861

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	12058	SIDE HOPPER FRAME	1
2	12054	SIDE HOPPER BACK	1
3	12050	SIDE HOPPER PLATE	2
4	10124	LYNCHPIN, 3/16	2
5	10112	BOLT, 3/8-16 X 1 GR8 ZY	4
6	12374	SIDE CHUTE, FRONT	1
7	10110	WASHER, 3/8 SAE GR8 ZY	4
8	12376	PIN, SIDE HINGE	2
9	12377	PIN, TOP HINGE	1
10	12375	COTTER PIN, 1/16 X 1/2	8
11	12378	PIN, BOTTOM HINGE	2
12	12565	SIDE HOPPER GRATE	1

NOTE, THE SIDE CHUTE ASSEMBLY IS OPTIONAL. STANDARD UNITS COME WITH A JUNCTION BOX COVER, PART # 12674.

